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MEMOIRS OF THE
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No. 64

EXCAVATIONS IN SWAT AND
EXPLORATIONS IN THE OXUS
TERRITORIES OF AFGHANISTAN

A Detailed Report of the 1938 Expedition

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FOREWORD

IT is indeed a great pleasure to me to be able to include in the series of Memoirs of the Archæological Survey of India, a work embodying the report of the British Expedition to the Swat Valley and northern Afghanistan in the summer of 1938. This Expedition was supported by several Societies in England and led by Professor Barger of the University of Bristol and Mr. Wright of the Indian Section of the Victoria and Albert Museum, and, let me hope, is the forerunner of many similar expeditions, indicative of Britain's newly awakened scientific interest in Indian studies. Archæology in India has such a wide range and limitless scope that it is bound to provide ample material to generations of scholars. It was with a view to open the field of work to non-official workers, whether from India or outside, that an amendment of the Ancient Monuments Preservation Act was passed by the Legislature in 1933. The only Expedition from outside which has since taken advantage of the new conditions was an American one sponsored by the collaboration of the Boston Museum and the Institute of Indic and Iranian studies which itself represents the concentrated effort of all American Societies interested in India. Unfortunately the work begun under the experienced leadership of Dr. Mackay was discontinued after the first season's work mainly for financial reasons. It is time that Britain, the only European country vitally interested in India, took lead in the matter and successfully organized Indian studies and conducted exploration and excavation activities in India. Over two decades ago the Royal Asiatic Society of London perceiving the great importance of Nālandā in the history of later Buddhism urged on the Department the necessity of excavating the ruined stūpas and monasteries. What is more, they made a special grant, which enabled the Department to initiate the work, which has been continued thereafter from the Department's own resources. In the new conditions, regular expeditions organized on lines similar to Mr. Barger's Expedition who may count on receiving every help and collaboration from the Archæological Survey, may undertake special investigations, which are sure to redound to the credit of British Oriental scholarship.

The territories which were chosen by the Barger Expedition for their work during 1938, were the Swat valley and the Oxus region of Afghanistan, both of which are in several ways intimately connected with India in several epochs of Indian History. The region of the Swat (the Vedic Suvāstu) was surveyed by Sir Aurel Stein, whose researches have already been published in a Memoir in this series. The work done by the present Expedition, however, in the region of Barikot, particularly at Amluk, Gumbat and Abarchinar, has added considerably to our knowledge. In the difficult region north of the Hindukush the exploratory survey was only possible owing to the generous co-operation

of the French Savants and the help of the Afghan authorities, and the Expedition's work has broken altogether new ground, which may be immensely helpful to explorers who will follow in their track. It is hoped that Professor Barger's wish that he might return to the 'stern but fascinating country' forming the scene of his present labours, and again 'feel the dust of history under his feet' will be consummated before long.

K. N. DIKSHIT.

SIMLA :

July 2, 1940.

PREFACE

THIS Memoir is an account of the work of a British expedition which spent the Summer of 1938 in excavating a number of sites in the Swat Valley and in making an archæological reconnaissance in the Oxus territories of Afghanistan. The expedition, a party of four, was supported by a number of learned societies in England, and the publication of this volume by the Government of India as one of this series is due to the kindness of the Director-General of the Archæological Survey, Rao Bahadur K. N. Dikshit, who must not, however, be held responsible for the views expressed or conclusions reached.

The main object of this short expedition was to pave the way for further British work on the Indian Frontier and beyond. Whatever the value of the material brought back on this occasion, it is satisfactory to record that it has contributed, in some measure, to a revival of interest in Indian and Central Asian studies in England, and that there is some prospect of this being the first of a series of campaigns, for which a representative committee is now being formed and is shortly to become responsible.

Preliminary reports of the expedition described here in detail were published in the form of papers read by members of the party to the Royal Geographical Society (*Geographical Journal*, May, 1939), the Royal Society of Arts (*Journal R. S. A.*, 9th December, 1939), the Royal Central Asian Society (*Journal R. C. A. S.*, April, 1939) and the India Society (*Indian Art and Letters*, April, 1940): photographs of the sites and finds appeared in the *Illustrated London News* of December 24th, 1938 (Swat), and April 22nd, 1939 (Afghanistan). We are indebted to the Royal Geographical Society for permission to reproduce the map of Afghanistan from the map of Central Asia drawn by the Society's draughtsman to illustrate the lecture which I delivered before the Society. The finds of the Expedition were placed on special exhibition in the Indian Section of the Victoria and Albert Museum during the Spring months of 1939, and the greater part of them have since been acquired by the Museum and added to its permanent collection. Other objects have been acquired by the Indian Institute at Oxford and by provincial museums.

Any list of acknowledgments to those who, at home or in the field, helped to make the undertaking possible, must necessarily be long, but cannot be exhaustive. As the first British archæologists to enter Afghanistan, we received a warm welcome from the Afghan Government, and it is impossible to speak too warmly of the kindness and hospitality of the Afghan officials in outlying parts of the country. For these exceptional facilities we were especially grateful to H. R. H. Sirdar Muhammad Naim Khan, the Afghan Minister of Education, and to H. E. Sirdar Faiz Muhammad Khan, the Afghan Foreign Minister, himself a scholar, who took a keen interest in our researches. Since 1922 the French Government have had a concession for archæological work in Afghanistan, and we were therefore under a deep obligation to M. Joseph Hackin, the present Head of the French Archæological Delegation in Afghanistan, for supporting our project in a generous spirit of Anglo-French collaboration. The Wali of Swat

not only gave us permission to work in his territory, but put the resources of his State at our disposal, and we shall not easily forget the kindness and solicitude for our comfort which he and his officials showed us. A party of archaeologists might well have appeared an embarrassment to the Government of the North-West Frontier Province at a time which was one of political disturbance in parts of their territories, and we remember the more gratefully the facilities which they granted to us, and the help given in particular by Mr. A. D. F. Dundas, C.I.E., I.C.S., Chief Secretary to the Frontier Government, and Major E. H. Cobb, O.B.E., Political Agent, Dir, Swat and Chitral.

An expedition must have a base, and it was a source of satisfaction that the authorities of the Victoria and Albert Museum for the first time found it within their province to support an archaeological expedition, both by giving special leave to enable Wright to join the party, and in many other ways. My friend Mr. K. de B. Codrington, the Keeper of the Indian Section, put his unrivalled knowledge at our disposal both before and after the expedition. He was a ready counsellor, and no matter connected with the expedition, its plans, its equipment, or its finds was too large or too small for him to give it his time and attention. I am also indebted to my colleague in the University of Bristol, Lt.-Col. O. D. Kendall, of the Department of Geography, for much help and advice, and also to Sir Eric Teichman, K.B.E., Mr. Robert Byron, Dr. T. Burrow, of the British Museum, and Lt.-Col. F. O. Lorimer.

Our warmest thanks are due to the Royal Geographical Society, to the Royal Society of Arts, and to Professor W. T. Semple, of the University of Cincinnati, for financial assistance, and also to the Royal Geographical Society for the loan of instruments. I am under a personal obligation to the University of Bristol for special leave of absence, and to my Senior colleagues, Professor R. B. Mowat and Mr. C. M. MacInnes, for generous help and encouragement.

We would like to express our appreciation of the constant interest which the Secretary of State for India, the Most Hon. the Marquess of Zetland, G.C.S.J., G.C.I.E., has taken in this work. A number of scholars have also given valuable advice and encouragement, among them Professor Alfred Foucher, Sir John Marshall, C.I.E., F.B.A., Professor Kenneth Mason, Professor Ellis Minns, F.B.A., Professor V. Minorsky, Mr. F. J. Richards, Sir Aurel Stein, K.C.I.E., F.B.A., Mr. John de la Valette and Dr. Mortimer Wheeler.

Of those who helped us in the field, we have a particular debt of gratitude to Lt.-Col. Sir Kerr Fraser-Tytler, K.B.E., C.M.G., H. M. Minister at Kabul, and Lady Fraser-Tytler. We wish also to take this opportunity of acknowledging the kindness of M. Ahmed Ali Khan Khozard, the Director of the Historical Section of the Afghan Academy, Major-General H. L. Haughton, C.M.G., C.I.E., Lt.-Col. D. H. Gordon, D.S.O., O.B.E., Major A. Lancaster, late H. M. Military Attaché at the British Legation at Kabul, M. Dilawar Khan, Curator of the Peshawar Museum, Dr. N. Macpherson, of the C. M. S. Mission Hospital at Peshawar, Mr. K. A. Gai, and Mr. W. H. I. Stevens, who were among those who helped us in different ways.

HONG KONG :
May, 1940.

EVERT BARGER.

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By courtesy of the Royal Geographical Society.

EXCAVATIONS IN SWAT AND EXPLORATIONS IN THE OXUS TERRITORIES OF AFGHANISTAN

CHAPTER I.

The Objects of the Expedition.

The expedition described in this volume divided its time and its resources between two objectives. Although some hundreds of miles of mountainous territory lie between the Swat Valley and the Oxus territories of Afghanistan, we were concerned, in both fields of operation, with remains of roughly the same period and with different aspects of the same problems. It has long been recognised that the lands between the Oxus and the Indus, and between the Caspian and the frontiers of China, form one vast canvas, which, if the history of Central Asia is to be written, must be studied as a whole. For, in the ten centuries between Alexander's expedition to India and the Islamic invasions, Central Asia was the meeting-ground of three peripheral civilisations. Greek kings ruled the greater part of the territories of modern Afghanistan and Russian Turkistan for almost two centuries after Alexander's death, and the monasteries of Gandhāra and Hadda, as well as M. Hackin's remarkable finds of Syrian glass at Begram in the Kabul Valley, show how closely the contact between the Mediterranean world and the Indian frontier regions was maintained in the succeeding period. It was also along the Highroads of Central Asia that Buddhism, taking with it some of the forms of Hellenistic art, spread, in the first centuries of our era, from India to China, and that, in the other direction, silk caravans made their way from China to the markets of the Roman Empire. Whilst the Buddhist civilisation of the Tarim Basin owes the genesis of its art to India and Iran, before Turkistan became a land of Turks, traces of Chinese imperialism and military achievement are to be found as far west as the Pamir passes.

Archæological evidence is scattered along the fringes of cultivation between the mountain ranges and the desert belt which spans inner Asia from the Dasht-i-Kavir to the Gobi. If it shows how civilisations came and went, it still makes a very indistinct picture, for there are large blanks on the archæological map. The contents of the desert oases of Chinese Turkistan are perhaps better known than the archæology of related regions, through the pioneer work of Sir Aurel Stein and of Professor Grünwedel and the late Professor Le Coq. But during the last twenty-five years a good deal of new evidence has been brought to light through the labours of the French Delegation in Afghanistan, as well as by excavation of Taxila and other sites on the Indian Frontier. Some of the chief problems of historical synthesis may perhaps be re-stated in the light of this

new material, for they explain some of the considerations that went to shape the plans of this first expedition and some of the objects towards which future work might be directed.

The story of the Greek kings who ruled on the Oxus for two centuries after Alexander's conquest, and who survived for perhaps another 130 years between the Hindukush and the Indus after the Greek retreat from Bactria, is known chiefly from their coins. Some episodes in their history are referred to by Classical writers, whose knowledge, however, became very fragmentary after about 150 B.C., when Parthia had driven a wedge between the Mediterranean world and the Hellenic outposts of Middle Asia. Chang K'ien, whose mission (138-126 B.C.) brought China into contact with the West, gives a cross-section of Bactria in the last years of Greek rule, and a few references to the Greeks may be found in Indian traditions. Archaeology has not so far added to these materials, and the history of the Bactrian Greeks has therefore remained the preserve of numismatists and commentators on Classical texts, whose labours have culminated in Dr. Tarn's masterly synthesis.¹

When the Greeks attempted to advance from the Indus to the Ganges, or down the Indus to the ocean, they appear to have lost their identity and to have been submerged in the tide of Indian history. Buddhism had become perhaps the dominant religion in the north of India in the reign of Aśoka, and we have practically no coherent archaeological record of the Greek settlements between the Indus and the Oxus before the appearance of Greco-Buddhist art in the monasteries of Gandhāra. There is a time lag here which the archaeology of Afghanistan may some day be able to explain. For the reign of Hermæus, the last of the Greek kings who ruled in any part of India or Middle Asia, came to an end about the turn of our era, and it is impossible, for various reasons, to assign with certainty a single piece of Greco-Buddhist sculpture to a much earlier date.

Although the account of the explorations which Masson made a hundred years ago among the "topes" of the Kabul Valley contains occasional reference to idols, the first fragments of Greco-Buddhist sculpture were not brought to Europe until the Second Afghan War. The first detailed account of sites in Gandhāra was the result of Sir Alexander Cunningham's tour in 1872-3.² Since then many thousands of examples of Greco-Buddhist sculpture have come to light all over ancient Gandhāra, from the Western Punjab to the Kabul Valley, but the historian's task is made extremely difficult by the haphazard nature of the excavations which produced them. These have nearly all been the by-product of military penetration or the work of the ubiquitous Pathan treasure-seeker. Many of the sculptures have been traded out of tribal territory, and have reached our museums with no better pedigree than the labels which they acquired in the Peshawar bazaar. Excavation at a number of sites on the Peshawar plain in British territory has produced some better documented material, but the very accessibility of some of these sites, close to mediæval and modern routes, has exposed them to the depredations of builders and iconoclasts. A

¹ W. W. Tarn. "The Greeks in Bactria and India," 1938.

² C. S. R. V. (1872-3) pp. 1-79.

good many cannot be excavated because they have been buried under modern villages or crowned by a Muhammadan shrine. Finally a number of important monasteries were completely plundered before the era of scientific excavation in India began with Sir John Marshall's appointment as Director-General of the Archaeological Survey in 1902. Takht-i-Bahi had been repeatedly 'dug' before Sergeant Wilcher was sent there to undertake official excavations on behalf of the Government of the Punjab in 1871. It was surprising, under the circumstances, that there was so much left to be uncovered when Spooner and Hargreaves set to work there between 1907 and 1911.¹ The mounds of Sahri Bahlol, which produced a collection of sculpture almost sufficient to fill the Peshawar Museum, appear to have covered a repository of sculptures perhaps brought there in time of invasion. Strictly speaking, therefore, these objects should perhaps not be considered as having been found *in situ*.² In the main, therefore, the evidence that comes from systematic excavation is confined to Sir John Marshall's twenty years' work at Taxila, the detailed report of which has yet to be published.³

With materials of such uncertain provenance, and in the absence of the evidence which only the scientific excavation of a large monastery in Gandhāra might have produced, M. Foucher's masterly synthesis of the genesis and development of Gandhāran art⁴ was inevitably based on iconographical analysis and considerations of style alone. The few examples of Gandhāran sculpture which might be dated by inscriptions are of dubious value for our purpose, owing to the controversies which still surround attempts to 'fix' Indian eras. If the beginning of the old Śaka era were accepted as 155 B.C., some three or four pieces of sculpture might be given reliable dates, but these all fall in the century between 150 and 250 A.D., that central period which is of least value for chronological argument. By calling the 'Greekish' figures early and the 'Indian' figures late, the art critic can put together a useful scheme of classification. But so long as the archaeology of Gandhāra has practically no 'fixed points' in time, the foundations are lacking for an archaeological chronology of the spread of Buddhism, of Buddhist art and of Hellenistic influences across the map of Asia. It is also impossible to settle such a fundamental problem as the interrelations of the schools of Gandhāra and Mathurā (where some of the material is securely dated), or to adjudicate with any certainty on their rival claims to have created the first Buddha figure, claims which are themselves now challenged by M. Hackin's publication of the first fragments of Buddhist sculpture from Bactria.⁵

Sir John Marshall's excavations at Taxila have gone a long way to overcome some of these difficulties. But a capital city east of the Indus is hardly a typical site, if, as Mr. Codrington has pointed out, one of our difficulties is to define provincialism. It is not yet possible to say whether the chronology deduced from the Taxila material can be applied to the whole of Gandhāra. Only excavation at other sites will show how far a scheme based on a chronological sequence of

¹ A. S. R. 1907-8, pp. 132-148, 1910-11, pp. 33-39.

² A. S. R. 1911-12, p. 101.

³ Interim accounts in Marshall, 'A Guide to Taxila,' 1921, and in A. S. R. 1912-13 ff.

⁴ A. Foucher, 'L'art gréco-bouddhique du Gandhāra', 1905-22.

⁵ J. Hackin, 'L'art gréco-bouddhique de la Bactriane', 1937.

types of masonry, and on a strict division of the material into two schools of sculpture, distinct in time and to some extent also in space, the 'Gandhāran' school (schist) and the 'Indo-Afghan' (stucco), can provide a uniform chronology which will fit all the facts.

The Gandhāran area contains two types of sites, both of which show walls of Gandhāran pattern. The Peshawar plain is dotted with mounds—there are over a hundred of them, most of which are not stūpas and monasteries, as used to be thought, but village settlements. From these sites come terra-cottas, beads, seals, pottery and other domestic objects. If some of this widely scattered material were systematically worked upon, it might almost become an international currency in the hands of the archæologist, as valuable for dating purposes on the long trail from the Indian Frontier to the Great Wall of China as the coins with which these objects are so often found associated in domestic sites.¹ In the frontier foothills, in Swat, Buner and the Khyber region, monastic sites are much the more numerous, although mounds, such as the acropolis which we excavated at Charbagh, are sometimes found. Unfortunately domestic objects are rarely found in monasteries, where the Mother Goddess was evidently less at home than in the villages. It is, therefore, difficult to associate specific pieces of sculpture with domestic objects which, because of their appearance elsewhere in a dateable context, might establish some fixed points in any chronology of Gandhāran Art. That association between two classes of material which come respectively from two different types of settlements is, however, one of the chief problems of the archæology of the Frontier regions, indeed of the archæology of Central Asia.

A beginning has been made in this direction at one or two sites on the Peshawar plain. Some terra-cotta figurines from recent excavations at Sari Dheri near Charsadda² are absolutely Greek, like those from the Sirkap site at Taxila. They were found in a mound apparently lacking all intelligible stratification, and which also contained a number of 'primitive' terra-cotta figurines and animal figures, as well as some sculptured schist heads unfortunately too battered for identification. There is some reason to think, therefore, that systematic work at some of the unexcavated mounds between Peshawar and Taxila might produce the beginnings of an archæological chronology. It was with such considerations in mind that we began operations on the mound at Charbagh during the latter part of our stay in Swat.

But the Peshawar plain is only a corner of the map of Central Asia. Beyond the Khyber Pass, in Afghanistan, where, with such fortunate results, the French obtained a concession in 1922, there is a series of sites in the flat Kabul Valley near Jalalabad to which the village of Hadda has given its name. It was there that Masson had found a great many coins of the late Roman Emperors,

¹ A certain amount of work has already been done on the terra-cottas, but much of the material is still unpublished. See K. de B. Codrington, 'Some Indian Terra-cotta Figurines' (*Indian Antiquary*, August 1931, p. 143); D. H. Gordon, 'The Mother Goddess of Gandhāra' (*Antiquity*, XI, pp. 70-79, 1937); and 'The Age of Frontier Terra-cottas' (*Iraq*, V, pp. 85-88, 1938). See also C. C. Das Gupta, "Bibliography of ancient Indian terracotta figurines." (*J. R. A. S. B., Letters*, IV, pp. 67-120, 1938).

² India Museum, South Kensington, Nos. I. M. 110 to 114-1937. D. H. Gordon, 'Some Terra-cottas from Sari Dheri' (*J. R. A. I.*, lxii, 1932). S. Corbiau, 'New Finds in the Indus Valley' (*Iraq*, IV, 1937).

and there the French excavators were fortunate enough to find a coin of Theodosius II bricked up in the wall, a *terminus ante quem non* for dating the hundreds of stucco figures, many of them more Roman than Greek, which fill rooms in the Musée Guimet and the Kabul Museum.¹ Some of this sculpture has more than a superficial resemblance to that found in the Baths of Caracalla at Rome. This fact, taken together with the coin evidence, points conclusively to a new wave of trade and cultural influence from the Mediterranean along the late Roman Frontier. In Persia, in Seistan and in the North of Afghanistan it may be possible to trace these contacts. In the meantime, the brilliant success of M. Hackin's excavations at Begram (Kapiśa, north of Kabul), where he found Syrian glass objects of the fifth century in the same room as Indian ivory caskets of a much earlier date², as well as the number of Roman coins found at places such as Sar-i-Pul on the northern flank of the Hindu Kush,³ provide further illustration of these probabilities.

In Chinese Turkistan the material is much richer, owing to the magnificent labours of pre-War expeditions and owing to the favourable climate which has done so much to preserve the remains of cities buried under the sand in desiccated oases beyond the present margin of cultivation. But some of the discoveries made by the French in Afghanistan during the last fifteen years have raised serious objections to the accepted archæological chronologies of the Tarim Basin, and therefore to the scheme of historical events which has been deduced from them. In the first place, the whole gallery of types found at Hadda, the Buddhas, the heavily ornamented Bodhisattvas, the barbarian warriors, the stately benefactors, even the caricatures and demons, are, with few exceptions, the ancestors of those we find in Chinese Turkistan at most of the sites from Khotan to Kizil. As Hadda is a fixed point in any chronological scheme (fifth century), it follows that the art of Chinese Turkistan must be later than had hitherto been supposed. Secondly, the study of the cave paintings at Bamiyan has provided a number of approximate dates and done much to alter the established conception of the origins and development of Sassanid Buddhist painting.⁴ This is indeed an obscure problem, for the caves of Bamiyan contain the only examples of Sassanid Buddhist painting outside the Tarim Basin, although, as Mr. Codrington has pointed out, the ewers and vases which are to be seen everywhere on the Ajanta frescoes are Sassanian in form, and the uniform of the retainers at Ajanta is a close parallel to the costumes found on many of the Bamiyan frescoes.⁵ The results of the four expeditions of Grünwedel and Le Coq, which brought back to Berlin a splendid selection of the paintings from the cave monasteries of Turfan and Kucha, are indeed a *jeu d'esprit* of the art critic, largely divorced from the facts and methods of archæology. M. Hackin showed by his brief examination

¹ J. Barthoux, 'Les Fouilles de Hadda,' III (1930).

² *Indian Art and Letters*, XII, 1938. *Revue des Arts Asiatiques*, XII, 1938. Photographs in *Illustrated London News*, 6 August, 1938.

³ *Journal Asiatique*, Vol. 226 (1936), p. 292.

⁴ J. Hackin, A. Godard, and Y. Godard, 'Les antiquités bouddhiques de Bamiyan,' 1928; J. Hackin and J. Carl, 'Nouvelles recherches archéologiques à Bamiyan,' 1933; J. Hackin, 'L'art bouddhique de Bamiyan dans ses rapports avec l'art bouddhique de l'Asie Centrale,' 1932.

⁵ *Geog. Journal*, XCIII, 1939, p. 394.

of the Basalik site near Turfan. when he accompanied the Citroën-Hardt expedition through Chinese Turkistan in 1931, how much could now be done, with our present knowledge, to revise Grünwedel's theories.¹

The Buddhist civilisation of the Tarim Basin was a synthesis of Iranian and Indian elements. As the two objections which have been made above to accepted chronologies concern respectively Indian sculpture and Sassanid Persian painting, they are clearly fundamental. Hadda and Bamiyan have in fact supplied a wealth of comparative material, the meaning of which perhaps only further work in Chinese Turkistan can illustrate and explain. In the meantime, if it is permissible to oversimplify the passage of Buddhism across the Pamirs, the chief problem is how the plaster sculpture of Hadda reached Khotan and Turfan. Until some of the missing links can be found, this is mainly a question of geographical probability, and it was one of the chief problems that we had in mind when we reached the north of Afghanistan.

The archæology of Central Asia makes an indistinct picture, rather like one of those Central Asian frescoes in which great patches of paint and plaster have peeled off the wall, leaving here the hand or the face of a Buddha, and there part of a garment or a corner of the background. It is by arranging these scraps of evidence into some sort of coherent pattern that it may be possible to write the history of Central Asia and to trace the spread of Buddhism and Hellenistic art from India and Iran, across the Pamirs and the Tarim Basin, to China. Our object in organising this expedition was a modest one. We wanted to call attention to these problems, and by adding something to this scattered raw material, to revive the study of a subject to which British enterprise has not contributed much since the war outside the administered frontier of India.

¹ J. Hackin, 'Recherches archéologiques en Asie Centrale,' 1931.

CHAPTER II.

The Plan of Campaign.

Plans for an expedition beyond the Indian frontier always depend on the political circumstances of the moment. Fifty years ago Sir Francis Younghusband was able to journey from Peking to Kashmir on the firman of the Emperor of China. The motor-lorry is now fast driving the camel from the desert high-ways of Asia, but in other ways travel in Central Asia is a much more pedestrian business than it was. Passports, permits for scientific work, stringent laws regulating the exploitation of antiquities, telephones and police posts: these are some of the obstacles that nascent nationalism has placed in the way of scientific expeditions.

Since the War, political conditions have been most unfavourable to British archæological enterprise in all the territories beyond Peshawar. Almost a quarter of a century has elapsed since Sir Aurel Stein and the late Professor Le Coq returned from their last expeditions to Chinese Turkistan. Since then that country has been in a perpetual state of unrest, and it is now the hinterland of a much wider conflict. The Asiatic territories of Russia are securely closed to foreigners. In Afghanistan, the French obtained in 1922 a virtual monopoly of archæological research. Finally, Waziristan has in recent years become an armed camp, which has made it difficult for the Government of the North West Frontier Province to extend hospitality to scientific expeditions in other parts of tribal territory.

The prospects were, therefore, far from bright. Our original goal was Chinese Turkistan, and for a few months in 1937 favourable reports from the British Consul-General at Kashgar suggested that an expedition might encounter no insuperable obstacle in carrying out a programme in the southern oasis, east of Khotan, territory which was at that time under control of the Tungan armies. With the collapse of the Tungan rebellion this programme had to be abandoned, and in January 1938 a telegram from Kashgar finally extinguished our hopes of reaching Chinese Turkistan. Immediately after this setback, the British Minister at Kabul was asked to approach the Government of Afghanistan, in the hope that they might be willing to extend hospitality to a British expedition. It was not long before a *deus ex machina* appeared in the form of M. Hackin, the Head of the French Delegation in Afghanistan, who had returned to Paris from a long expedition. He undertook to use his good offices with the Afghan Government on our behalf, and an agreement was subsequently reached at a meeting at the Quai d'Orsay by which the French Delegation in Afghanistan gave their support to our proposals in a spirit of Anglo-French collaboration. Despite this generosity, so rare to-day in the world of science, our project was still far from realisation. As we were anxious to break new ground, we counted to make an archæological reconnaissance in Badakhshan, that part of the Oxus plain and the foothills of the Pamir massif to which the members of the French

Delegation, occupied with their great tasks at Hadda, Begram and other sites to the south of the Hindu Kush, had not yet penetrated. The regions north of the Hindu Kush, along the frontiers of Russian Central Asia, are naturally those in which, for political reasons, it has always been most difficult for the Afghan Government to allow British subjects to travel or to make a prolonged stay for scientific work. These difficulties were complicated, in our case, by the fact that we should be the first British expedition to enter Afghanistan, and when we sailed for India in the last days of May 1938 they had not yet been overcome. Within a few days of our arrival in India, we learned that, on account of disturbances on the Waziristan frontier, it was impossible for the Afghan Government to allow a party of archaeologists to cross into their territory. Some time previously we had approached the Government of India for permission to excavate in Swat, but the time was not propitious, and the day before we left England, a telegram arrived from Simla rejecting this plan.

To set out under such auspices might have appeared hazardous in the extreme, but if we were to make use of limited leaves of absence and the resources which we had collected for this project, we had to use the summer season for such a campaign. This risk was, however, more than justified by the outcome, for as soon as we reached our headquarters in Peshawar, we met with good will on all sides. There had been some misunderstanding about the nature of our proposed work in Swat, which a visit to the summer headquarters of the Frontier Government at Nathiagali was able to remove. As soon as it was clear to the Chief Secretary that we proposed to establish a permanent camp in Swat, and not to strain the resources of the Ruler's levies by requiring protection for a mobile caravan, a satisfactory plan was sanctioned. In the first days of July we hired a motorbus to bring our equipment to Malakand, the frontier of administered territory on that windy ridge, some seventy-five miles north-east of Peshawar, first stormed in the campaign of 1895 which opened up the Swat route to Chitral. Our equipment was unpacked within the fort, at Circuit House, which the Frontier Government had kindly placed at our disposal as a preliminary base. From the walls of the fort on the narrow crest above the Peshawar plain, we first saw the Swat river, eddying in half a dozen channels through the bright green rice fields which cover the narrow floor of the valley. (Plate I, 1.)

Our party numbered four: Philip Wright, of the Indian Section of the Victoria and Albert Museum; T. D. Weatherhead, who was the surveyor and photographer; W. V. Emanuel, who had charge of the equipment, commissariat and transport, and was also the interpreter of the party, and Evert Barger, of the University of Bristol, who was leader of the expedition. Two English-speaking Pathan servants had been engaged in Peshawar, a cook, Nur Alam, and a maid-of-all-work, Sardullah Khan, who proved himself to be a man of great resource. The cook also brought with him his fifteen year old son as a general assistant. The equipment had been kept to a minimum, since, when we left England, our plans were still uncertain and it was therefore essential to ensure mobility. At the same time, it had been necessary to provide for a possible division of the expedition into two parties.

We spent a week at Malakand, during which arrangements were made for us move up the valley to camp in Swat State. After the Political Agent, Major E. H. Cobb, had performed the first of his many services to us by securing the good will of the Ruler of Swat and his consent to our working in his territory, two of the party were invited to go on a visit to the Ruler's capital at Saidu Sharif, some thirty-two miles from Malakand. For nearly twenty years this transfrontier territory has enjoyed comparative peace under the grandson of the holy Akhund who ruled in the middle of last century and who lies buried at Saidu. The present Wali or Ruler of Swat is a remarkable Pathan chieftain, who has not only initiated orderly government and peaceful economic development in the Swat Valley, but has extended his frontiers through Buner to the Indus and into Swat Kohistan. He rules these hilly territories by means of a standing army of local levies, quartered in scattered forts, sixty or seventy in number, built of sun-dried mud, with tall twin towers which give them, from a distance, the appearance of a Norman keep. Telephone wires run all over Swat State, although they have no connection with the outside world, and the main valleys have motorable roads. The Wali's son entertained us to lunch in his own residence. Afterwards we were received by the Ruler himself in the lofty hall of his palace where he sits crosslegged on a divan dispensing justice to groups of his subjects. His dignified, gentle manner, his interest in our plans and in the history of his territories, his solicitude for our comfort and the way in which he put the resources of his State at our disposal made an unforgettable impression on us. We left Saidu Sharif in the late afternoon with the certain knowledge that we had been in the presence of one of the few great men of the Frontier.

In planning our campaign in Swat, we were guided by the account of Hiuen Tsiang, the Chinese pilgrim who visited ancient Swat (Udyāna) about 630 A.D. when Buddhism was already on the decline, and more especially by the account, which appeared in this series, of Sir Aurel Stein's tour in Swat and Buner in 1926.¹ Sir Aurel's chief object was the elucidation of a number of problems of ancient geography raised by the accounts of Alexander's passage to Aornos on the Indus, for he was the first European to set eyes on the mountains of Upper Swat since Classical times. But he also visited and described a considerable number of Buddhist sites, although excavation of course lay outside his purpose. The information supplied by his narrative was invaluable to us, not only because it guided us to the most interesting areas, but because the detailed descriptions of the sites which Sir Aurel examined were compiled with that meticulous accuracy which is a matter of course to the greatest of all Central Asian explorers.

Our first base was at Barikot, a large village twenty miles up the valley from Malakand. Its position on the only highway up the Swat valley, at a place where three side valleys leading to Buner and the Indus join the main bed of the Swat river, makes it the natural centre of the surrounding district. That this district was both rich and populous in ancient times is proved by the great

¹ Sir Aurel Stein, 'An Archaeological Tour in Swat and adjacent Hill Tracts.' (*Memoirs A. S. I. No. 42*, 1931). 'On Alexander's Track to the Indus,' 1938.

number of ruins scattered about the hillsides. Sir Aurel Stein's map, which embodied the results of his survey, had shown that by far the largest concentration of ruins anywhere in Swat was to be found in these three valleys which run roughly east of Barikot, and are all within reach of a base camp pitched close to that village. Nearly two months were spent in the Barikot district, and our operations in Swat were completed by a month at Charbagh, twenty miles higher up the valley on the borders of Upper Swat.

The camp was pitched at the foot of Barikot hill (Plate I. 2), a conical mass of rock at the end of a chain of hills thrust out into the level bed of the river, which Sir Aurel Stein identified with Bazira, once stormed by Alexander on his march to the Indus. Half a mile away was the modern village of Barikot, where the Tahsildar and his son, Muhammad Humayun Khan, a student at Islamia College, Peshawar, gave us constant help and hospitality. It was not a healthy situation, surrounded as it was by rice fields where swarms of mosquitoes breed. But a higher camping-ground in one of the valleys near the sites which we intended to excavate would have offered neither shade nor water. The Swat river was about a hundred yards from the camp. It was a safer water-supply than the wells in neighbouring villages where each summer brings an outbreak of cholera. Although the valley is flat the river runs with the speed of a torrent over a bed of huge boulders, making it impossible to swim or even to stand in less than two feet of water. The choice of the months of June to October, which are the worst possible season for work on the Indian Frontier, was dictated by circumstances beyond our control. The great heat would have made excavation on the Peshawar plain virtually impossible, had that been part of our plans. Our camp at Barikot was 2,500 feet above sea-level, or 1,500 feet higher than Peshawar, and many of the sites were well above the floor of the valley (Amluk was 6,000 feet above sea-level). The temperature at Barikot rarely sank below 80 degrees at night, and by noon it was usually about 107. Rain hardly ever interfered with the excavations, although during long periods there was a thunderstorm every night or during the early hours of the morning, which made it necessary to dig deep trenches round the camp. These storms broke with extreme violence, and in the space of an hour or two they turned the dried-up water-courses of the three side-valleys into raging torrents, undermining and crumbling the roads and tearing up trees by their roots. It was, therefore, easy to appreciate the function of the ancient barrage which Sir Aurel Stein discovered in one of these valleys above Barikot.

Our camp at Barikot soon became a large establishment. In addition to our three servants from Peshawar, we engaged a water-carrier, a tonga which alone made it possible to work daily at sites several miles from the camp, and a number of workmen from Barikot and neighbouring villages—between ten and twenty-five according to the state of the excavations. The Wali had arranged to supply six guards from his fort at Kotah a few miles down the road, who, besides being responsible for camp protection, accompanied us on our various surveying expeditions. They were a delightful set of men who were always our willing helpers. Finally, a great number of sight-seers, medical patients, and tribesmen

on their way from distant parts came to visit our camp. This was particularly gratifying, because the success of archaeological exploration here, as so often elsewhere, depended to a very large extent on the willing co-operation of the local inhabitants who know where *gumbats* (stūpas) are hidden among the mountain fastnesses above the valley, and where *buts* (idols) have been found. The first tidings of Amluk, a site which had not been made known to Sir Aurel Stein, were brought by shepherds who took their buffaloes to that remote mountain top for summer pasture. These men had never seen a white man before. Until rumour reached them of our camp at Barikot and our quest for *buts*, their only contact with European civilisation had been the occasional passage of an aeroplane over their eyrie.

Our work at Barikot had two distinct, though closely related objects. The first was a survey, as comprehensive as possible, of all ancient remains both in the three side valleys and on the right bank of the Swat river. The map which we made (Plate XII) attempts to show not only the existing remains of stūpas, monasteries and fortresses, but also those of some of their dependent villages and terraced cultivations, dead for fifteen hundred years. It was our hope that in this way it might be possible to determine the area of settlement, and the relation between domestic remains and areas of cultivation—to see, in fact, what this small area looked like in Buddhist times. Our second object was to excavate a number of sites, not so much with a view to collecting sculpture and museum pieces, as to estimate the relation of different pieces of sculpture to one another, to examine the archaeological context in which they are found, to establish the main types of sculpture in Swat, and to determine, if possible, the relation between specific pieces of sculpture and domestic objects—coins, seals, iron-work or terra-cottas, which, because of their appearance elsewhere in a dateable context, might help to provide the beginnings of an archaeological chronology of Gandhāran Art. Two or three more general problems must always be at the back of the mind of the archaeologist who turns to these Frontier regions: why it was that such a virile, hybrid, local art sprang up in a comparatively small area in these rocky foothills, and spread, undergoing some modifications on the way, to Afghanistan and Chinese Turkistan; how such a large population—Hiuen Tsiang speaks of 1,400 monasteries and 18,000 monks—was supported in these bare, now almost waterless valleys; how and when the monasteries came to be abandoned and destroyed.

As it will be convenient to describe the excavation in geographical rather than chronological order, something may be said here of the general conditions of work and of the plan which our operations followed. Being a party of four for the first part of the expedition's stay at Barikot, it was possible for excavation and reconnaissance to be done concurrently. This had the obvious advantage that sites discovered and examined could be marked down for immediate or subsequent excavation, if they appeared to be of sufficient promise. It was not our aim to excavate any particular site completely. Such dogmatic adherence to systematic rules would not have produced results consistent with the enormous labour involved. It would have taken nearly two months and all our

resources to clear a large site such as Kanjar Kote. Nearly all the sites in Swat have, at one time or another, been burrowed into by treasure-seekers, and a number have been altogether ruined for scientific excavation. Others which appeared to have been comparatively little dug into in recent times soon showed by the total absence or paucity of sculptural fragments, or by other signs, that they had been despoiled or destroyed, perhaps at the time of their abandonment. It also became clear at an early stage in our work that the cells of the monks and other parts of their domestic establishments contained virtually nothing, even after the floor had been laid bare by the removal of enormous quantities of wrecked masonry and detritus. Finds were in fact practically limited to the stūpa courtyards, and indeed they were as a rule only abundant round the remains of the small votive stūpas. Since the ground plans of most of the sites could be traced from the surface remains, and as they showed few variants on the type of monastery well-known from Takht-i-Bahi and other sites on the Peshawar plain, there would have been all the less reason to dig stubbornly where experience showed that there was little prospect of finding anything of value. The selection of sites for excavation was always a matter of doubt and difficulty, because it was impossible to tell from the external appearance of a wrecked stūpa or buried monastery what remains the courtyards might contain. One or two of the best preserved stūpas were the least productive. Further, we were dealing with sites belonging to what was beyond doubt an intrusive culture, monasteries and hermitages built on rocky sites chosen for their inaccessibility, which were abandoned or destroyed by barbarian invaders. We were, therefore, denied the possible excitement of finding traces of earlier or later occupation, which might have helped to place Gandhāran culture in its historical context as part of a continuous story.

It was only for the first three weeks of our stay at Barikot that all the members of the expedition were at work there, for when favourable news arrived from Kabul on August 1st, the party was immediately divided. Barger and Emanuel went on to Afghanistan whilst Wright and Weatherhead remained in Swat. Most of the reconnaissance work was done in these first three weeks, and by the time the resources of the expedition had to be divided, a rough programme had been agreed upon for the excavations on which Wright and Weatherhead were to spend the rest of the summer. It envisaged a further month's work at two of the higher sites at the top of one of the side valleys (Amluk and Chinabara), and an exploration of sites on the right bank of the Swat river (Gumbatuna and Parrai), followed by a month's excavation of the acropolis called Jampure Dheri at Charbagh in Upper Swat.

Since it would have been neither convenient to move camp frequently, nor permitted by the authorities responsible for our protection, a great deal of marching was involved every day in order to reach the various sites from Barikot. Kanjar Kote, the scene of our first excavations, could be reached by tonga in about three-quarters of an hour. But the cart-roads only stretched for three or four miles up the valleys; Gumbat, for instance, was half an hour's climb from the end of the track, and Amluk four hours by a way too rough for mules.

To work at sites on the right bank of the Swat river, the torrent had to be crossed every day on a raft of sheepskins, after which it was necessary to wade across flooded rice fields. The reconnaissance and excavation parties had, therefore, to start before dawn, especially as it was too hot to work, at any rate at the lower altitudes, between half-past-ten and four in the afternoon, and they were often not back in camp until after sundown. To excavate Amluk, after it had been reconnoitred and arrangements had been made to employ some of the shepherds as workmen, two of the party were detached to stay there in a cave. There they lived on buffalo's milk, eggs and such supplies of flour as could be sent up to them. This arrangement was not, however, found satisfactory to the Wali, who was responsible for our safety, as Amluk was situated within a mile of the frontier between Swat and a disturbed area of British tribal territory. When work at Amluk was resumed later by Wright and Weatherhead, they moved the camp from Barikot to a site about a thousand feet below the summit of the mountain. It was a difficult matter to have the heavy sculptures brought down the mountain from Amluk, but this was managed in the end by relays of porters, one of whom brought the large Amluk Buddha down on his back without assistance.

When Wright and Weatherhead moved the camp to Charbagh, they once again came under the friendly care of the local Tahsildar. During their stay at Charbagh, the two members of the party were able to make a brief excursion into Upper Swat as well as a day's motor-tour of Buner, and when the work was completed for the season, they received an invitation to stay for a weekend with the Ruler's son, the Waliahd, as his guests at Saidu Sharif.

The Government of India deputed the Curator of the Peshawar Museum, M. Dilawar Khan, to inspect the finds of the expedition, and to select, in conjunction with Wright, a number of pieces of sculpture as a nucleus for the Museum which the Wali of Swat proposed to set up in his palace at Saidu Sharif, as well as two or three pieces for the Peshawar Museum. When the Curator had come to Barikot and the division of the finds had been made to the satisfaction of all concerned, the bulk of the sculptures were taken to Peshawar and thence consigned to the Victoria and Albert Museum in London. The members of the expedition reached London at the end of October, after an absence from England of exactly five months.

CHAPTER III.

Excavation of Sites in the Barikot District.

Survey of forts at Kalungai.—During our stay at Malakand we visited and surveyed a group of ruins at Kalungai, in the lower Swat valley some eight miles north-west of Malakand. At this point the valley is about a mile wide, but immediately west of it the hills close in and the river enters a narrow gorge through which it flows to meet the Panjkora river three miles further west. A levy post on the south bank of the Swat commands the mouth of this defile. Strung out upon the rocky spurs of the ridge running southward behind the levy post is a line of fortified houses like those described by Sir Aurel Stein at Kotah and other places in Lower Swat.¹ On the opposite bank of the river, a line of similar buildings could be seen crowning a ridge running up into the hills of Dir. The buildings rest on rock ledges, levelled up when necessary with masonry platforms. The style of their masonry belongs to the Gandhāran period, and they follow a more or less uniform plan. A square tower, sometimes with a round bastion at each corner, and built up solid to a height of 10' or 12' above the ground, adjoins a group of rooms ranged in straight line or round a square. The outer walls of these rooms, now standing to a height of 5' or 6', are often as much as 3' thick, and are pierced by narrow apertures splayed inwards. The average dimensions of the solid towers were some 23' square, while the area covered by the adjoining rooms was usually about three times as big. Scarcely any potsherds are to be seen on the surface in the neighbourhood of these forts. A few hundred yards west of the ridge on which these buildings stand, a series of ancient cultivation terraces, supported by rough stone walls, could be traced on the lower slopes of the hill. The cultivators of these fields perhaps lived in huts of mud or brushwood, and used the stone forts principally as places of refuge in time of need.

By the end of a week's stay at Malakand arrangements for our work in Swat had been made with the Wali, and we were able to move into his territory. The considerations which led us to select Barikot as a base have been discussed in the previous chapter (p. 9). In the following account the excavations and survey work in the Barikot district will be described in geographical rather than chronological order, starting with the sites in the most westerly of the three valleys which converge on Barikot and then going east. This westernmost valley runs south-west from Barikot, and is called Kandak after the stream which flows through it to join the Swat river at the foot of Barikot hill. During the summer months this stream is little more than a trickle, except after one of the heavy thunderstorms which occur every few days in Swat, when it is swollen for a few hours into a tearing yellow torrent. The fields on the floor of the valley are under cultivation, but the upper slopes are for the most part too steep and rocky even for the enterprising plough of the Swati farmer. A road connects

¹ Tour in Swat, p. 8.

Barikot with three or four hamlets further up the valley, which then rises steeply up to the range on which the site known as Amluk is situated.

Excavations at Kanjar Kote.—Close under the ridge on the western side of the valley, about 3 miles from Barikot, are a group of ruins known as Kanjar Kote (Plan, Plate XI, 1). The surface remains were surveyed by Sir Aurel Stein in 1926,¹ but for the sake of convenience they may again be described here. For 100 feet below the crest of the ridge, the hillside is covered with walled terraces on which the foundations of buildings can still be traced. Most of these are now mere heaps of debris, but it was possible to identify here and there rows of tall niches, and one or two vaulted chambers were standing almost intact, though half-filled with stony detritus. The lowest series of terraces extends for about 100 yards north-east and south-west, and was occupied, as the surface remains showed, by a group of monastery buildings on the usual Gandhāran plan. At the north-east end was a courtyard (A) containing a stūpa, and partly surrounded by domed niches like those in the chapel court at Takht-i-Bahi, though all but two of them had completely collapsed. From the south-west corner of this court a roadway, flanked by high niches set back on broad platforms of masonry rising 3 or 4 feet above the level of the road, led past the entrance of a second court (B) and thence to the upper terraces. A gully which bounds the whole complex of buildings on the west side is probably the bed of a stream now permanently dried-up. The enclosure (B), with a level grassy floor from 2 to 3 feet below the level of the roadway, had plainly been an open court devoid of buildings. Along its western side, the roofs of stone cells could just be traced projecting about a foot above the level of the road. The surface of court (A) was a welter of broken masonry, in the middle of which a mound of large stones rising several feet above the surrounding chaos, indicated the remains of a stūpa. On the eastern side of the court, shallow burrows intersecting the piles of stones, and a few pieces of battered schist carving scattered about on the surface, showed that local diggers had been there hunting for sculpture. In the course of their search they had uncovered a patch about 9' long and 3' deep of the masonry facing of the square base of the stūpa, and part of the steps in the middle of its eastern side. Above the square base, traces of a round base could just be made out in the mass of fallen stones which was all that remained of the drum of the stūpa. The surface of the courtyard on the western side of the stūpa was apparently untouched, and we decided to start by clearing this area; subsequently the northern and eastern parts of the court were also partially uncovered.

The masonry of the square base of the stūpa, which measured 31' square, was almost intact, and retained large patches of a covering of white plaster. The pavement was reached at 7' below the surface. On the western side of the large stūpa a row of small stūpas was uncovered, irregularly aligned at distances varying from 2' 3" to 4' 9" from the base of the main stūpa (Plate II, 1). On two of them part of the original drum was still standing, but on the rest, as on most of those subsequently discovered, everything above the square base had crumbled.

¹ Tour in Swat, p. 14.

Part of a modillion cornice in stucco was still clinging to the base of one of these stūpas, and small pieces of stucco mouldings were found in the debris that surrounded them. This debris contained several fragments of the stone umbrellas which once crowned the small stūpas, and also three of the *harmikās*, carved with a relief on each side, which fitted around the shafts of the umbrellas on top of the stūpas. Several fragmentary reliefs found at the foot of the small stūpas, seem, judging by their curve, to have formed part of a frieze decorating the round base of the large stūpa. The best preserved, measuring 15"×8", is divided into two panels by a band of imbricate ornament. The upper panel consists of a continuous frieze of figures of no apparent significance; the lower consists of two scenes from Buddha's early life—his trials of strength with other youths, and his wedding—separated by the familiar framed Indo-Corinthian column. (No. 31, *Illustrated London News*, Dec. 24, 1938).

Lying among the stone fragments were a number of the iron clamps and nails with which the reliefs were originally fastened to the walls, and also of bent pins with round heads about 1½" in diameter, which may have served as door studs.

Below the stone paving the soil was archæologically barren. In none of the monasteries we excavated in Swat were any objects found beneath the pavement. The culture represented by these sites appears to have been entirely intrusive.

Clearance of the north-eastern part of the court (A) revealed further rows of small stūpas. Here we found, besides stone fragments, some small heads of Buddha and one of a lion that had evidently formed part of the stucco decoration of the small stūpas. Owing to the extreme sparsity of the objects recovered in proportion to the area laboriously cleared, further excavation of this court seemed unlikely to be of any profit, and was abandoned after eight days' work. Although it seemed improbable that any objects of interest would be found in the enclosure (B), experimental trenches were sunk along its north-eastern side, and diagonally to the centre from the western corner. Nothing was found in these trenches but fragments of coarse red pottery. The pavement was reached at just over 3' below the surface. At the western corner of the court one of the domed cells already mentioned was excavated and was seen to be a square chamber, like the cells in the lower courtyard at Takht-i-Bahi, 9' high from its stone floor to the centre of the domed roof, with a door 2' high giving onto the court.

Apart from the two courtyards, two of the separate cells were cleared of debris but nothing was found in them.

Excavations at Gumbat.—A mile and a half south of Kanjar Kote on the same side of the valley are a group of mounds, representing the remains of stūpas, and a shrine with a high dome, which probably gives the site its name of Gumbat. For a description of the shrine, a bare shell of Gandhāran masonry now inhabited by a Gujar family, reference may again be made to Sir Aurel Stein's report.¹ The

¹ *Tour in Swat*, pp. 12 ff.

stūpas on either side of the shrine were much more decayed even than the stūpa at Kanjar Kote, and partly overgrown with scrub. But here, as elsewhere, the surface remains were no trustworthy indication of what lay below. The sculptured remains dug up round one stūpa at Gumbat were far more numerous, and in general better preserved, than those discovered in the stūpa court at Kanjar Kote.

It was impossible to clear any of the stūpas on the southern side of the shrine as they were surrounded by fields under cultivation. Accordingly, operations were confined to the stūpa mound to the north of the shrine. Its top had long since been trodden down, and was used by the Gujars as a milking place for their cattle. Lower down, patches of wall made it possible to trace the line of the stūpa base which was 31' square. It was found to be surrounded by small stūpas, standing on a pavement which was reached at 5' below the surface.

A number of stone fragments were recovered from the debris round the large stūpa and between the small ones. The round base of the main stūpa had evidently been decorated with a similar frieze to that at Kanjar Kote. Several curved panels were found, precisely parallel in arrangement to the fragment from Kanjar Kote already described. The scenes of adoration which fill the upper band of the frieze are remarkable for the variety of ways in which the Buddha figure is represented. On the fragments discovered he is once seen seated in European fashion, once surrounded by an aureole encircling his whole figure (not merely a nimbus behind the head) and several times clumsily curved in full profile (No. 71 Plate V, 1)—none of them ways of representation by any means common in Gandhāran art.

In a group of purely decorative reliefs the use of Hellenistic motifs is particularly marked. Several small friezes are carved with figures grouped in pairs between Indo-Corinthian pilasters (No. 51, Plate III, 1). With their toga-like dress and declamatory attitudes, these figures smack strongly of the Roman forum. Such friezes bear more than a superficial likeness to the carvings on early Christian sarcophagi, with their rows of saints grouped in pairs beneath the arches of a colonnade. The Buddhists were of course drawing on the same rag-bag of Hellenistic motifs as the early Christian artists in Italy and the Near East. On several of the Gumbat reliefs appear the two long-tailed birds perched on the rim of a bowl, which recur with such insistence in the Hellenistic art of the eastern Mediterranean, the most striking being a cornice, probably from a small stūpa, where this motif is combined with acanthus leaves and women holding drinking-cups to their lips (No. 62, Plate III, 2). On another cornice are some floating cupids, somewhat gross of form and feature, and wearing heavy anklets (No. 65, Plate III, 3). Several small figures of Buddhas and Bodhisattvas were found, mostly very much defaced, and some hands of larger figures. A Bodhisattva (No. 80) is illustrated in Plate VII. There were also a few fragments of stucco decoration.

Besides the usual clamps and pins, the ironwork found with the sculptures included one more interesting object. This was a bell, consisting of a cylinder

2½" in diameter, with an S-shaped hook passing through a ring at its upper end, (No. 41, Plate VIII, 3). The bell measures 9" from the tip of the hook to the mouth of the cylinder, one side of which has largely broken away, only the top section being complete. Part of the clapper was found attached by rust to a tongue projecting from the roof of the cylinder, though this was too much broken to show the exact method of attachment. The discovery of this bell forms a pleasing footnote to the remark of the Chinese pilgrim Sung Yun, who visited Swat in the 5th century, that in that country 'at evening the sound of the monastery bells may be heard on every side'.¹

Reconnaissance of Barikot district.—During the excavation of Kanjar Kote and Gumbat, which to some extent was carried on concurrently, members of the party took it in turns to reconnoitre the surrounding country, partly in order to gather material for a survey of all the remains, and partly to explore fresh sites for excavation. The direction of these reconnaissances was at first determined by Sir Aurel Stein's report made ten years before, but later the antiquarian information brought into our camp by the Tahsildar's son or the villagers themselves, enabled us to add a good many sites to those already marked on Stein's map. In the ten years that had elapsed since his visit, and partly perhaps in consequence of it, native excavators of saleable sculpture had evidently not been idle. All too often some site in the hills would be brought to our notice only because local diggers had made a haul of 'buts' there within the last few years. Indeed, practically every monastery site we visited bore traces of their activities. The visits of agents from the antique dealers of Peshawar and Rawalpindi, and the inquiries of European visitors, have made the Swat villagers alive to the demand for Gandhāran sculptures, and many of their houses contain carvings which patient inquiries may induce the owners to display. Fortunately the pilfering of the monasteries had seldom been thorough, and at least a part of nearly every site was untouched.

Excavations at Amluk.—The work at Gumbat was nearing completion when the shepherds who spent the summer with their flocks in the hills at the head of the Kandak valley, brought word to Barikot of a *Butkhana* ('place of idols'). Four miles from Barikot, the road along the Kandak valley ends abruptly among the trees of a small cemetery. From here to the shepherds' site, 4,000 feet above the valley floor, was a stiff four hours' climb in a westerly direction, over slaty boulders and through thick shrub where even the local guides sometimes lost the indistinct track. More than once on the way up, a naturally rounded knob of rock tricked us for a moment into thinking that we were looking at a man-made stūpa; more than once, the regular shape and smooth surface of some piece of schist lying by the side of the track, induced us to turn it over, half expecting to find it carved on the under side. Where the western ridge of the Kandak valley merges with the knot of hills at its southern end, its crest forms a grassy plateau about 50 yards wide, running roughly east and west. Along the plateau's northern edge there are traces of ancient foundation walls, while

¹ 'Buddhist Records of the Western World,' transl. S. Beal (1884), Vol. I, p. xciv.

at its western end the ground slopes up to a massive slab of rock, crowned by a ruined stūpa (Plan, Plate XI, 2). Twenty yards down the hill to the north of this is the mound of a second stūpa, while 30 yards north-west of the first stūpa a rocky knoll, some 70 yards by 35 yards, carries the remains of foundation walls, probably of a monastic establishment. Round these two eminences the ground falls sharply in a wild landscape of ravine and scrub and great pinacles of boulder of strangely artificial appearance. The Swat valley, seen far below through the slowly drifting clouds, looks common-place and tame.

At the time of our preliminary visit of investigation there were signs of recent digging in the debris round the main stūpa, and we picked up part of a seated Buddha figure in unusually good repair. Some months before, we were told, a party of pillagers had spent a day on the site, but the Wali's orders had caused them to decamp, apparently before they had time to do much damage. The site seemed worth excavating, but it was obviously impossible to work it from our base at Barikot. Part of the camp had to be transported up the hill on the backs of coolies—the track being too steep in places even for mules—and for the first stage of the excavations two members of the party lived for several days in a cave at the foot of the stūpa mound. The shepherds who found a similar shelter on the hills below proved vigorous, if easily discouraged diggers. Unfortunately, owing to the proximity of this desolate place to the frontier between Swat and British tribal territory, it was necessary to cut short the excavation of the site after a few days' work. It was, indeed, only the generosity and good will of the Wali that it was possible to camp there at all. A fortnight later we were able to complete our excavations at the site by climbing up each day from a camp some 1,000 feet lower down the hill.

The stūpa (A) was supported on a shallow masonry platform built onto the great boulder already mentioned (Plate II, 2). It had a rectangular base, 33' × 27', with the longer sides running north and south. In the centre of the north side a platform 8' wide projected 2' 6" from the stūpa base—evidently part of a stairway, some of the lower steps of which could also be traced. In the mass of fallen masonry which was all that remained of the upper part of the stūpa, a few feet of wall made it possible to trace the line of the round base, which has a diameter of 22'. On its northern side, in line with the stairway descending from the square base, was a small platform, 3' 6" wide and projecting 4' from the round base. As will be seen from the plan, the round base of the stūpa is not placed at the centre of the square base, but nearer to its southern end, so that at the northern end a considerable free space is left on either side of the stairway platform.

The stūpa is thus unusual in plan. It is also distinguished by the facing of the bases, which consists, not of masonry of the customary Gandhāran type, but of neatly chiselled blocks of regular shape and uniform size fitted together without the usual packing of thin slates. Similar masonry has

been used on one of the small stūpas at Amluk, and on two completely decayed stūpas at Shaban, two miles below Amluk in the Kandak valley.

On clearance of the square base of the stūpa a good many stone sculptures were found lying among the debris on the stone paving. The finds suggest a fairly high proportion of figure sculpture to relief panels. Most striking of the latter were four fragments of a frieze apparently composed of scenes from Buddha's life alternating with Indo-Persian pilasters in niches or frames (No. 114, Plate IV, 3).

The arrangement of the fragments in Plate IV, 3, represents a reconstruction of their relative positions in the complete frieze, though not, of course, of the original spacing between them. The scenes, or such parts of them as have survived, present some iconographical puzzles. On the left, the Buddha is shown seated under the pipal tree and surrounded by worshippers, among whom the monks, with their shaven heads, are prominent. According to the system of iconographical clues worked out by M. Foucher in his classic analysis,¹ the pipal tree should indicate that the scene is connected with the moment of Buddha's Illumination. But at that moment, when the Master first grasped the Truth for himself, and had not yet preached it to others, the monastic order of Buddhism did not exist. The foundation of that order is supposed to be represented by the five monks who appear, for the first time, as M. Foucher says, 'in this world and on our sculptures,' seated on either side of the Buddha when he preaches the First Sermon at Benares. M. Foucher, indeed, regards the presence of these five monks as a clue distinguishing the First Sermon from scenes connected with the Illumination, with which it is otherwise apt to be confused. If M. Foucher's interpretation of the various clues is accepted, it must be admitted that the artists of Gandhāra were apt to combine the symbolism of these two famous episodes in a perplexing manner. A panel in the possession of Major-General Haughton, of which he kindly showed me a photograph, shows Buddha with the five monks seated about him, and other figures in the background much like those in the upper part of the Amluk scene. The fact that he is seated under the pipal-tree and in the 'earth-witness' attitude, suggests that the scene belongs to the cycle of the Illumination. On the other hand, the presence of the five monks, and the wheel of the law between two deer seen in the front of the Buddha's throne, point as clearly to the Sermon in the deer-park.

Evidently in Gandhāra the iconography of the life story was not so precisely fixed, or else not so strictly followed, as has sometimes been suggested. The monks represented in the Amluk panel are not the traditional five seated disciples; nevertheless, their appearance in a pipal-tree scene looks like a further instance of the laxity of Gandhāran iconographers, or of the elasticity of the canon which they followed.

The other scene which has survived from this frieze does not, like the first, contain contradictory elements, but though more complete, it is equally difficult to identify with certainty. The Buddha is surrounded by disciples or worshippers

¹ A. Foucher, *L'art gréco-bouddhique du Gandhara*, I., esp. p. 435.

in lay dress. He is seated under an Indian fig tree, with his right hand raised in the gesture of 'reassurance' and his left (missing in the photograph, but actually recovered and since restored) grasping the corner of his robe. The nature of the tree suggests a reference to the First Sermon at Benares, and the gesture of reassurance, though in general vague and unspecific, is often used in that connexion. The absence of any monks makes it very improbable that the episode is the First Sermon itself. The scene may represent the gods urging the Buddha to preach. In most versions of this scene, the gods are headed by Brahmā and Indra. In the Amluk panel, the pre-eminent figure seated on Buddha's left might conceivably be Indra, but his gesture, a replica of Buddha's own, is not one of prayer, and moreover there is no sign of Brahmā, who in this episode usually holds the place of importance on Buddha's left. If then the scene really represents the Invitation to preach, it is an unorthodox version.

At the northern foot of the knoll on which stūpa (A) was situated, was the mound representing a second stūpa (B). This was very much decayed, a few feet only of the facing of the round base being intact. Excavation disclosed that the stūpa had no square base; the round base was 15' in diameter. It stood on a paved terrace and was surrounded by small stūpas, of which only the box-like square bases remained, varying in size from 5' to 10' square. As already mentioned, one of these small stūpas was faced with masonry of the same type as stūpa (A). A niche in the base of another small stūpa contained the headless figure of a seated Buddha, originally about 2' high (Plate II, 3). The niche was not in the centre of the side of the stūpa, nor was there any other niche in this or any of the other small stūpas. The figure it contained was the only one found *in situ* during the whole of the summer's excavations.

The sculptures recovered from the small stūpa terrace included a Buddha figure, 27" in height, seated in *dharmacakra mudrā*, which was found lying face downward on the pavement near the northern edge of the terrace (No. 107, Plate IV, 2). A smaller Buddha figure from the same area is illustrated in Plate VII, 2. From the debris round stūpa (B) came the most interesting piece of sculpture discovered during the three months' work in Swat. The Buddha head illustrated in Plate IV, 1 (No. 158) with its wide open, staring eyes, its rounded cheeks and fleshy lips parting in a smile, is quite distinct not only from the other figures found at Amluk, but from all the familiar types of Gandhāran Buddha. There is in the British Museum a head strikingly similar to this one in style and technique; it is said to come from Kafirkot, a monastery a few miles west of Amluk. Apart from this, no other head of the type is known to us in any Gandhāran collection. There is, on the other hand, an unmistakable affinity with certain sandstone heads from Mathurā, for example, a head in the Indian Section of the Victoria and Albert Museum, South Kensington (I. M. 3-1927), and published by Vogel.¹ The Amluk head is executed in an idiom so similar to this and other Mathurā sculptures that it is difficult to believe that the man who made it had not seen the products of the Mathurā school, or even worked

¹ J. Ph. Vogel, 'La sculpture de Mathura,' plate XXXb.

in that school himself. That the inspiration in this case passed from Mathurā to Gandhāra, and not *vice versa*, is made practically certain by the fact that the Amluk and British Museum heads are exceptions strongly differentiated from the mass of Gandhāran Buddha types, whilst the Mathurā heads in question belong to a considerable group of homogeneous carvings.

The influence of Gandhāran work on the artists of Mathurā has been recognised in the occurrence at Mathurā of Buddha figures in the Gandhāra convention. Intercourse between two great centres of art in the Kushan empire was of course highly probable, particularly in view of the wide export of Mathurā sculpture to other parts of India, but up to the present there has been little definite evidence of the currency of Mathurā products and ideas on the Frontier. The discovery of this head at Amluk leaves no room for doubt that Mathurā artists sometimes came to the North West and worked in the local schist, or else that their works were very closely and sympathetically studied by some at least of the Gandhāran artists. A fingerpost in the same direction is provided by a group of small figures, mostly carved in a brownish schist, which have recently come to light in the Frontier area, and bear an unmistakable family likeness to the Yakshīs on the Mathurā railing pillars of the 1st and 2nd centuries A.D. The Amluk head was probably carved not earlier than the related Mathurā heads, which can be dated by inscriptions to the 2nd and 3rd centuries A.D., and is very likely roughly contemporary with them. In view of the chaos in which the sculptures were found, and the known practice of making periodical additions to the decoration of the monasteries, the dating of this one head, vague as it is, is not necessarily applicable to the other sculptures found at the site.

No trace of stucco decoration was discovered at Amluk.

Excavations at Chinabara.—As already mentioned, the excavation of Amluk had to be broken off after a few days' work. A fortnight later, after Barger and Emanuel had left for Afghanistan, we were able to move the camp from Barikot up to a spur on the hillside below the ridge, about a mile to the north-east of Amluk itself, and from there to complete work on the site. While in this camp, where we had for neighbours a colony of cave-dwelling Gujars, rumours reached us of recent digging at a place further up the valley. Three quarters of a mile along the hillside south of the camp, a scramble over a series of deep rocky gullies brought us to a small grassy plateau. Two adjoining terraces, the lower about 60 yards long by 30 yards wide and the upper rather smaller, had evidently been artificially levelled and showed traces of ancient foundation walls, whilst further up the hill the remains of a completely wrecked stūpa could be recognised on the summit of a rocky knoll. Even this obscure place had not escaped the attention of a Hindu dealer, who, some months before our visit, was said to have dug there for a few hours. A few shallow pits in the surface of the upper terrace, and some fragments of sculpture, were evidence of his activities. We sank a trench across the upper terrace, and another running at right angles to it. These revealed portions of walls and some fragments of sculpture within a foot of the surface. Unfortunately the lack of time, and the difficulties and expense of maintaining the camp so far from any village, made it impossible to do more

than a few days' excavation—insufficient even to establish definitely the nature of the buildings to which the walls belonged. The sculptures found lying near the walls,—some rounded friezes, carved with stereotyped adoration scenes—had plainly formed part of the round bases of small stūpas. The outstanding finds were two complete panels, and part of a third, all carved with a familiar Gandhāran motif—men carrying on their shoulders an undulating garland (No. 170, Plate VII, 3). Each panel is complete in itself—it is not a section of a longer frieze. On the analogy of similar panels from Jamalgarhi, now in the British Museum, which are said to have been found *in situ* on the risers of steps, it may be assumed that such was the function of the panels at Chinabara, though no trace of steps was found. The garland-carrying figures are gross and paunchy with enormous flat feet. They are at once coarser and more vigorous than similar figures on the majority of examples of this well-known Gandhāran adaptation of a Hellenistic theme. A few of the figures have one leg advanced and raised, with the foot resting on a conveniently placed bowl. All of them wear anklets: some are otherwise naked, some have a shirt-like garment reaching to the calves, one or two a tight-fitting vest with short sleeves, and one a dhoti. As usual, the figures framed in the upper loops of the garland are playing various instruments—pipes, cymbals, pan-pipe and an Indian drum of *mridaṅga* type.

A fragment of a fourth panel of similar form is decorated with another variation of the undulating scroll framing human figures. In the loops of a vine tendril are the busts of two figures holding drinking-bowls, while between them a griffin-like creature with wings spread straddles a bowl.

No piece of stucco was found, but three terracotta fragments evidently came from a large Buddha head in that material, with tightly curled hair. One of these fragments is an eye measuring over two inches in length, so that the head was probably about twice life size. Probably many of the vast figures which once stood in the great empty niches to be seen in almost every monastery were made of terracotta. If so, it is not surprising that fragments of these colossi so rarely survive.

Several trenches were sunk in the lower terrace but only one of them, at the end nearest the upper terrace, disclosed traces of wall. Judging by the nature of the objects found near them, these were probably part of the living quarters of a monastery. Close together at the angle of two walls, two feet below the surface, were a cylindrical iron vessel, a small earthenware lamp and some fragments of larger pots, and a square schist lamp with an inscription in Kharoshthī script round the rim. As far as it is legible this runs: 'Sagami caudisami (? ga da) agisala (e go so?).' In the monastery of the four quarters ? in the refectory (?).....

Other sites in the Kandak valley.—Repeated inquiries and personal exploration failed to disclose any other considerable sites in the hills at the head of the Kandak valley. At Shaban, at the foot of the mountain mass blocking the top of the valley, the huts of a small Gujar colony are clustered by the side of the stream. Here are the remains of two completely wrecked stūpas, which have

already been mentioned as showing traces of the same type of masonry as stūpa (A) at Amluk. and further down the hillside on the way to Barikot are two more stūpa mounds. Halfway up the eastern slope of the valley, almost due east from Gumbat, are the remains of a monastic establishment. A clearing on the hillside, here thickly wooded, is occupied by the huts of another tiny settlement. A level grassy terrace looks like the site of an ancient courtyard, and the steep hillside above is covered with the remains of walled terraces and ruined cells.

Sites in the Najigram Valley.—The second of the three valleys which meet at Barikot is conveniently named after the village of Najigram, three miles almost due south of Barikot. Immediately above Najigram on the western side of the spur which divides this valley from that leading to the Karakar pass, are the ruins of a fort-like building, and of a completely wrecked stūpa. On the opposite side of the valley, about half a mile south-west of Najigram village, a narrow rift in the hills shelters the ruins of Tokargumbat—the large stūpa, monastery buildings and barrage described by Sir Aurel Stein.¹ An experimental clearance of the western side of the stūpa base produced a few extremely battered stone carvings, and portions of the fallen umbrella of the stūpa.

Excavations at Abarchinar.—A mile further south up the Najigram valley is the mouth of another wooded ravine, running parallel to that of Tokargumbat. A quarter of a mile up the path beside the stony bed of the stream which emerges from this ravine, a large group of monastery ruins comes into view, known as Abarchinar, (Plan, Plate XI, 3). The only building still standing on the right bank of the stream is a stūpa (A) of imposing size, and almost intact but for the usual cleft in the dome made by treasure-seekers. The dense undergrowth which enveloped the lower parts of this and all other buildings on the site made accurate measurement difficult. The massive rectangular platform or base of the stūpa, rising to a height of 30' above the stream-bed, measured 40' × 55'. Above this was the usual round base, carrying a dome divided into tiers by projecting cornices. Along the eastern side of the square base runs a low chamber or vaulted corridor.

On the opposite side of the stream the main group of buildings rise in tiers up the sharply sloping hill. The eastern end of the lowest series of terraces was evidently occupied by the living quarters of the monastery. An open court, (P) about 32 yards square, with a level grass-grown floor, is partly surrounded by the remains of stone-built rooms of various shapes and sizes, (S. T. V). On the eastern side of the court, these are backed against a high outer wall which is still intact to a height of about 40' above the level of the ground outside. On the inside, the floors of the rooms vary in level, but are nowhere more than 15' below the present summit of the outer wall. The latter, which was originally several feet higher, is pierced at varying heights with rectangular windows, splayed inwards. 10' above the present floor level of room (S) a row of triangular niches, each formed by three long slates placed end to end, has been let into the wall. On the south side the containing wall rises 50' above the bed of the stream. It is the outer

¹ *Tour in Swat*, pp. 15 ff.

edge of a platform honeycombed with small cells and vaulted chambers at various levels, the roofs of the lower chambers being for the most part a foot or two above the present level of the central courtyard.

West of the large courtyard and its surrounding chambers, the devotional buildings of the monastery are crowded onto a series of narrow ledges or artificial platforms between the bed of the stream and the hill which rises steeply behind them. The whole site is thickly overgrown with thorny scrub. Immediately west of the court (P) is stūpa (L) with a completely decayed dome carried on a round base 3' high and 90' in circumference. Immediately to the north of it are the remains (M) of a row of domed cells measuring about 12' × 13'. West of the stūpa and on the same terrace is a rectangular open court (O), 54' long, bounded on the north by the high wall of the terrace above and on the south by the remains of further cells and vaulted rooms (I). On the terrace above the west end of this court rises a large domed cell (F), measuring 10' 9" × 13' 9". Part of the dome has fallen in: its highest point must originally have been 25' above the level of the floor. At a higher level still are the stūpa (C) and the remains of a gigantic niche (D), 27' square, with walls still standing in places to a height of 30'. Before the open front of this niche are a series of ledges, each about 6' wide, descending to the level of the terrace wall. To the west of this is a small square cell (E) and next to that the stūpa (B). The stūpas (B) and (C) are almost identical in dimensions and construction, and a description of B will suffice for both. The square base or platform was traceable on the south or valley side, where it measured 21'. On the other three sides it had broken down and merged into the stony debris and scrub of the hillside. Above this the round base, 92' in circumference and originally 4' 6" high, is practically complete. The drum it carries has been deeply quarried on the west side, but enough remains to show that its summit must have been reached some 15' above the top of the round base. Its surface is divided into tiers by two cornices of flat stones. The lowest tier and the round base are divided at intervals of 6' by pilasters formed of thin slates embedded in the masonry. Most of these have fallen out, leaving only the matrices or empty niches in the stonework.

On the jungly hillside above the main group of buildings are the scattered remains of further buildings, mostly small vaulted chambers.

Experimental trenches were sunk in the neighbourhood of all four stūpas. At stūpas (A) and (C), these produced only a few fragments of much battered reliefs. Clearance of the round base of stūpa (L), at the north end of the large courtyard, was more productive. The dome of this stūpa, as already mentioned, had completely crumbled. The fact that its sculptural remains were far more numerous than those of the other stūpas at Abarchinar, all of them relatively intact, is an interesting instance of the inverse proportion frequently observed between the extent of the preservation of the building itself, and of its sculptural decoration. The fragments recovered include purely decorative details, such as panels of formal lotus pattern, parts of two stone pilaster capitals, of separate figures, and of descriptive scenes. One of the latter, probably part of a birth scene, representing a drum evidently played by unseen hands and an onlooker

biting his fingers in wonder, is remarkable for the deep undercutting of the stone, the figures being treated almost in the round. Two figures, a moustachio'd prince with flat circular headdress and a lady with bat-like wings, are also treated in deep relief and are perhaps part of the same scene. (No. 144, Plate V. 5.)

In contrast to these pieces the one complete figure found—the seated Bodhisattva, illustrated in Plate V. 4, (No. 138). is carved remarkably flat. The broad, flat face, with the hair arranged on the forehead in a double band of curls, is of a type met with among the figures on the reliefs. A very similar Bodhisattva from an unknown site in Swat is in the possession of Major Cobb at Malakand.

One of several detached heads found at this stūpa was that of a Bodhisattva with a lion's head in the centre of the headdress. (No. 139, Plate V. 2). Possibly the lion ornament has some significance in connection with Gautama's name Śākyasinha (Lion of the Śākya).

Of the two incomplete pilaster capitals, one has the usual small Buddha figure seated above the curling acanthus leaf at the centre. In the other this place is occupied by a more unusual group, consisting of a standing figure, flanked by two attendants, in a four-horsed chariot (No. 141, Plate VII, 4).

The stūpa (B), at the western end of the monastery complex, has already been described. No stone fragments were found in its neighbourhood, but on clearing the round base eleven stucco heads were found lying at intervals in the debris round its foot. All but one of these were Buddha heads, of varying sizes but all very similar in type, the chief difference being in the treatment of the hair, (Nos. 132 and 127, Plate VI, 1 and 3). This is represented in three different ways:—by wavy ridges running from side to side of the head, and divided into columns by slight indentations running from front to back; as waving across the head from front to back, starting from a point in the centre of the forehead, the undulations of the hair being represented by pear-shaped indentations: and lastly—a more formal version of the second method—by a network of regular criss-cross lines forming diamond-shaped panels, each having a circular indentation in the middle. The eleventh head is a Bodhisattva of the same facial type as the Buddhas, (No. 131, Plate VI, 4). The hair is indicated by wavy ridges, with a fringe of curls beneath a fillet on the forehead. Four of these heads were hardly damaged at all, but none of them showed any trace of colour. No fragment was found of bodies to which they might have been attached. In the surface debris at the foot of the round base a small copper coin was picked up, which appears to be Sassanian, but it is too much damaged for more precise identification.

Excavations at Nawagai.—Half a mile before the village of Nawagai is reached on the way from Barikot to the Karakar pass and Buner, the road skirts a rounded spur thrust out by the ridge separating the Najigram and Karakar valleys. On the northern slope of this spur, some 50' above the road, is a massive stone terrace, about 110' square, carrying the remains of two stūpas. As far as could be judged these were identical in plan, but the smaller one was too much decayed for accurate measurement. The larger of the two has a rectangular base, 40' × 55',

surmounted by the usual round base with a diameter of 30': above this the dome is still standing to a height of 18'. Both stūpas have a stairway in the centre of the west side, rising to a projecting platform level with the top of the square base. A remarkable feature of the larger stūpa was the great size of some of the stone blocks composing the facing of the base. A block at the north-west corner measured 4' 4" × 11" × 11". The drum of the stūpa had as usual been dug into, and much broken masonry littered the bases. Part of the area at the foot of the round base had been cleared; on the surface here we picked up a much defaced stone fragment, showing a figure on a camel riding to the right; behind the camel is a soldier with spear in hand, and between the camel's head and the rider are the head and shoulders of a third man. The rider holds some object before him in both hands; possibly he is one of the princes to whom Buddha's relics were distributed, bearing home his precious charge. Foucher illustrates a parallel scene in the Lahore Museum, where the same armed attendants appear behind the camel, and the relic casket in the rider's hands is more easily seen.¹

Clearance of the rest of the round base of the large stūpa and of parts of the square bases of both stūpas produced few sculptures of any note. A much battered piece showing four figures in attitudes of adoration must have belonged to a scene done on a larger scale than usual, as the figures, which are only shown from the waist upwards, measure a foot in height. Further down the hill to the north of the stūpa terrace we cleared what proved to be a line of small stūpas of the usual type. Here, too, the sculptural remains were few.

Twenty yards up the hill, above the stūpa terrace, was a mound just recognisable as a completely ruined stūpa. On the spurs further up the hill were the remains of several strong houses like those at Kalungai, and further up still a group of monastery buildings, much ruined and overgrown with scrub. A row of niches in one of the courtyards appeared to have contained statues which had recently been removed.

Exploration of sites on the right bank of the Swat river.—While in camp at Barikot we crossed the river to visit the group of ruins at Gumbatuna, a small village on the opposite bank; a mile and a half down the river from Barikot, and especially to investigate the small circular shrine, discovered by Sir Aurel Stein in a small ravine north-east of the village. The interior of this had evidently been cleared, and the villagers told us that a few years previously a 'sahib' had dug out the debris and carried off the only piece of sculpture it contained.

Three miles up the river from Gumbatuna on the same bank is the large village of Parrai. A mile north of the village, at the mouth of a ravine running up into the hills, are the ruins of a large monastery spread out along a series of terraces about 200 yards long. There are the usual courtyards, and the much decayed remains of three stūpas, one of them partly surrounded by cells. Clearance

¹ 'L' art gréco-bouddhique du Gandhâra,' I, p. 594, fig. 295.

round the base of this stūpa produced a few pieces of sculpture, some of them in a soft green schist of very pleasing appearance. One of these—a fragment of stūpa railing ornament—is illustrated in Plate V, 3 (No. 319).

In the surface debris at the base of a second stūpa were a few coins of Soter Megas. One of the villagers told us that he had discovered, (and long since disposed of) a large hoard of coins, beneath the floor of a vaulted chamber on the hill above the monastery.

CHAPTER IV.

Excavations at Charbagh in Upper Swat.

In the Upper Swat valley, monastery remains are comparatively few, but there is plentiful evidence of occupation in ancient times. Many of the rocky spurs jutting out from the hills on the valley's eastern side carry the remains of Gandhāran foundation walls, and their summits are plentifully strewn with potsherds. We were anxious to supplement our survey of monasteries by excavation at a purely domestic site, but the neighbourhood of Barikot offered no suitable opportunity. Accordingly, while in camp there, we devoted a day to visiting a mound near Charbagh, some twenty miles further up the valley, which Sir Aurel Stein had reported as showing traces of ancient habitation.¹

A mile E. N. E. of Charbagh village, a large flat-topped mound stands out in the middle of the broad valley through which a track gains the passes leading to the Ghorband river and the Indus. (Plate II, 4, and Plan, Plate XI, 4.) The mound, known as Jampure Dheri, is roughly oval in plan and rises to a height of about 120 feet above the level of the surrounding fields, the flat top being about 40 yards long by 30 yards wide. The rocky cove of the hill crops out in places to form natural terraces for cultivation. These have been supplemented, particularly on the lower slopes, by artificial terracing; patches of foundation walls of Gandhāran masonry appear at various levels on the sides of the mound. Pottery fragments lay thick on the summit of the mound and on many of the terraced fields. At the time of Sir Aurel Stein's visit twelve years before it was reported that some metal images had been found on the lower slopes, but that these had long since been melted down. On our first reconnaissance of this site we were shown a brass spoon, nickelled over, which was said to have come to light, after a rain-storm, in the same place. Its handle is in the form of an image of Śiva, and it appears to be comparatively modern. A number of coins and clay seals shown us in Charbagh may have come from the same site.

A quarter of a mile south of the mound is a ruined stūpa, which has recently been incorporated in the buildings of a modern farmhouse. About half way between this stūpa and Charbagh village, on the southern side of the valley, is a small circular mound ringed with partly ruined Gandhāran walls, to be discussed in greater detail below. On the same side of the valley, a quarter of a mile from Charbagh and just east of a large clump of trees sheltering a small mosque, was a stony mound probably representing a completely decayed stūpa, since broken sculptures were from time to time turned up there by the plough. Up the valley beyond Jampure Dheri were further traces of the ancient population in the shape of ruined walls and rock-carvings, which were seen and described by Sir Aurel Stein.¹ This evidence of occupation in Buddhist times, the surface finds reported from Jampure Dheri itself, and the potsherds lying thick all over the mound, decided us to spend if possible the last month of our time in Swat in the excavation

¹ Tour in Swat, p. 52.

of this mound. Accordingly, at the beginning of September, we moved our camp to Charbagh, where the Tahsildar, Abdul Ghaffar Khan, rivalled the authorities at Barikot in giving us that friendly and active assistance which made our stay at both places so thoroughly pleasant. At Charbagh we were able to camp in considerable comfort by the side of the mosque already mentioned, a quarter of a mile outside the village. In the twenty-six days which remained before the date of our inevitable return to Peshawar, it was not possible to do more than make a number of trial excavations in various parts of the mound. For a number of reasons we never employed more than thirty workmen, and the stony nature of much of the soil made digging extremely laborious and slow.

It seemed improbable that much would be gained by excavating in the upper terraces, owing to the apparently slight depth of the soil which there covered the natural rock. Nevertheless, the striking number of potsherds strewn about the ploughed surface of the flat top of the mound, encouraged us to sink a trench (A) across it from side to side. The position of this and other trenches subsequently dug is indicated on the plan. In trench (A), the rock was reached at a depth of about 4' 6". Subsequently trench (B), about 85' long, was driven into the side of the mound about half-way up its southern slope. No structural remains were found, but the enormous proportion of stones in the soil seemed to indicate the debris of collapsed buildings. Digging was discontinued here when a hard rocky floor was reached about 10' below the surface in the middle portion of the trench, which ran across a strip of cultivated field. In (C) trench, at the southern foot of the mound, the rock was reached at 9 feet below the surface.

The objects found in all these trenches were much the same—plentiful fragments of coarse red pottery, some animal bones, a few small pieces of glass, clay beads and one or two terracotta figures.

Trial trenches dug in the lower slopes on the south-western side of the mound uncovered a complex of walls about a foot below the surface and extending for a distance of just over 100' E. and W. with cross walls of varying length running south at intervals. As time only permitted a superficial excavation of this area, it was not possible to arrive at a coherent system for these walls, which so far as uncovered presented a very irregular plan. For the most part about 1' 6" thick, they consisted of large and small undressed stones set very irregularly in mud. In most places they stood only some 2' 6" high, the foundation being about 3' 6" below the surface. At this depth there had evidently been an earthen floor, since a number of large pots, grouped in pairs, were found standing at that level. The pots, which varied from 1' to 1' 6" in height, were either globular, with a rim about 1" deep, or bulging to a broad shoulder at about two-thirds of their height, of coarse red ware and either completely plain or with very simple incised decoration. South of the central portion of the wall uncovered the depth was taken down to ten feet, but elsewhere not more than five feet.

Apart from a few complete small pots, examples of which are illustrated in Plate VIII, 1 the objects recovered from this area were similar to those from the trenches (A-C) already described, and which may be considered collectively.

Potsherds were plentiful at all depths from the surface down to 6' below it, no difference in their nature being perceptible over the whole range. They were all of reddish ware, varying considerably in texture. Several spouts and handles were found. The ware was either plain or decorated with very simple incised or raised patterns, mostly on the shoulder of the pot. Four terracotta figurines, all of common types, were picked up in various parts of the excavations. These were a horse with saddle, an animal (perhaps a bull), a ram's head, and a female torso of well-polished dark red clay. (Nos. 284, 276, 257, 259, Plate VIII, 2.) Two iron objects were found—a sickle and a heart-shaped bracelet. Details will be found in the list of objects.

Three-quarters of a mile south-west across the valley from Jampure Dheri, as mentioned above, is a roughly circular flat-topped mound rising to about 80' above the level of the valley. On the south side it slopes gradually into the hill behind, but the other three sides rise sharply from the surrounding fields. Top and sides are roughly terraced for cultivation, the terraces being supported partly by modern walls of roughly piled-up boulders, and partly on the remains of massive Gandhāran walls. This walling is nowhere continuous for more than 20'. The surviving fragments seem to have formed part of two rings of wall, one running round the rim of the present summit of the mound, and the other encircling it about 30' from the top. Like Jampure Dheri, the surface of this mound was thickly strewn with potsherds. A trench driven into its lower slopes on the north side produced a similar crop of objects to those found at Jampure Dheri. In the bed of a small stream, 100 yards west of the mound, we found a rough stone slab carved with the figure of a Bodhisattva. The figure, which was headless, measured 2' 6" in height. The left leg and right hand are broken. The left hand, resting on the thigh, holds a long-stalked lotus. The wasp-waisted figure is by no means Gandhāran in style. Like other rock-carvings in Upper Swat, noticed and illustrated by Sir Aurel Stein,¹ which probably represent Avalokiteśvara, it appears to belong to a later period than the Gandhāran remains.

¹ Tour in Swat, pp. 44, 46, 51 and figs. 32, 36, 38.

CHAPTER V.

General Conclusions.

The Swat landscape during the first seven centuries A.D. must have looked very different from the valley as it appears to-day. Especially marked is the contrast between the location of modern and ancient settlements. The present-day population lives in the valley bottoms, while the ancient settlements are almost invariably in the hills. In Upper Swat, where monastery ruins are comparatively few, the foundation walls and the masses of potsherds on many of the rocky spurs of the hills show clearly enough where the ancient inhabitants made their homes: on the low ground, generally speaking, there are no such traces of former occupation. It is, of course, possible that in the main valley of the Swat river extensive irrigation and rice cultivation have swamped the remains of ancient settlements, but judging by the absence of remains on the comparatively dry floors of the side valleys, this is unlikely, for existing monastery ruins, with very few exceptions, are situated well up the hillsides. A monastic settlement presupposes a neighbouring village where the monks could beg their daily meal. In many places the houses of the Buddhist villages, other than fortified centres, have disappeared, but their deserted cultivation terraces are still to be seen, high up on the rocky hillsides. The fact that many of the monasteries stand by the side of gullies which once must have held water but are now dried up, is an indication of the climatic changes which must have occurred since they were built and lived in. To-day, the hillsides are almost entirely treeless. Yet all the Chinese pilgrims who visited Swat in the days when Buddhism flourished there, speak of its fertility and its well-wooded landscape. The often-quoted story of Babar hunting tiger in the Peshawar plain in the 14th century shows that that part of Gandhāra was still covered with jungle long after the Buddhist period.

The most striking impressions derived from the excavations as a whole were the extreme sparseness of the sculptural remains, and the damaged condition of those that were found. This state of affairs is, of course, nothing new in Gandhāran archæology. Stūpas reduced to stone-heaps, figures torn from their niches, hands and heads from their bodies, friezes chipped and sliced—such is the common tale of Frontier excavation. No wholly satisfactory explanation has ever been offered for this chaos, and the results in Swat, where only one figure was discovered *in situ* during the whole of the season's work, makes it desirable at least to raise the question again.

The destruction of the monasteries of Gandhāra used to be generally attributed to the White Huns who swept into Northern India in the middle of the fifth century A.D. Yet even in the comparatively accessible sites of the plain, archæological evidence suggests that the extent of the ravages of the White Huns may have been over-estimated. Sir Aurel Stein formed the impression that the disfigurement of the sculptures unearthed at Sahri Bahlol in 1912 was due to natural causes, rather than iconoclasm.

To what extent the chipping, battering and breaking of the sculptures found in Swat may have been due to natural causes, it is impossible to say. A large proportion of the damage consists in a lateral slicing of the stone parallel to the flat face of the relief, leaving a smooth plane of cleavage across the salient parts of the carving. Such slicing is frequent, for instance, in the hands and faces of the figures. Anyone who has handled a piece of Gandhāran schist knows how easily it chips and flakes. It is possible that when the coating of paint which at first protected the sculptures against the elements had worn off, water might seep into the cracks of the stone and a succession of heavy frosts eventually cause a cleavage. It is hard to believe, though perhaps not impossible, that frost alone should have been responsible for damage of a more drastic kind, such as the breaking of standing figures at the ankles. The number of bodiless heads and headless bodies suggests that iconoclasm at least played its part in the destruction of the sculptures. It is, however, difficult to attribute the destruction of the buildings themselves to the same cause. Sturdy indeed would be the *odium theologicum* which vented itself in a systematic destruction of the numberless solid stūpas of the Gandhāran landscape. Yet in the vast majority of stūpas discovered, the dome and drum have been reduced to a welter of loose stones. In Swat, the proportion of comparatively intact stūpas is larger. It might be thought that this was due to their relatively secluded position, but such a conclusion is not borne out by the fact that one of the best preserved, the great stūpa of Shankardar, a mile beyond Barikot, is also one of the most accessible in the whole territory, while many of those in the remote side valleys, as at Amluk, have completely collapsed. Some of the stūpas no doubt gradually crumbled without any human agency to assist their fall. It is likely, however, that many of them owe their collapse principally to the treasure-seekers, who, perhaps in mediæval as well as modern times, have burrowed through the solid masonry of the dome in search for the relic casket or coins deposited at the centre. All of the stūpas examined in Swat, whose domes were still standing, showed a ragged cleft, several feet wide, dividing the dome from top to bottom. All these domes belong to stūpas of a considerable size, large enough perhaps to survive the burrowing which may have proved fatal to smaller structures, such as the main stūpas at Kanjar Kote and Gumbat. However this may be, when the upper part of the stūpa collapsed, the falling masonry might well dislodge and disfigure the sculptures attached to its base or to the surrounding small stūpas. The debris in which the latter were found consisted, indeed, for the most part, of fragments which had evidently been part of the stonework of the stūpa. The treasure-seekers who burrowed into the stūpa domes were not concerned with the sculptures adorning the stūpa walls. Nor, until fairly recently, were the villagers who subsequently quarried in the ruins for building material. Such people may, therefore, have caused a certain amount of incidental breakage in the days before the commercial value of well-preserved sculptures was recognised.

There are, then, a variety of factors which may all have played their part in reducing the monasteries and their sculptures to the state in which they are

found—iconoclasm of Hun and later of Muhammadan invaders; damage from natural causes, especially frost; collapse of buildings caused or hastened by digging of treasure-seekers; sculptures injured by villagers quarrying for stone. It is less easy to find reasons for the extreme sparseness of the sculptural remains unearthed in Swat, in relation both to the area of building which must be presumed to have been decorated, and to the quantity of sculpture found in similar monasteries in the Gandhāran plain. At Gumbat, one of the more fruitful sites excavated, clearance of the main stūpa brought to light some half-dozen fragments which, judging by their curved shape, must have formed part of a frieze encircling the round base. The average size of these fragments was about 16"×7". If, as seems probable, the whole base was once covered with sculpture, it is obvious that an enormous proportion has completely disappeared. What had become of it? One would expect to find the pavement littered with fragments, but there were no traces whatever of the remainder of the sculptures. This was a question raised more or less acutely by every site we examined in Swat. The bareness of these mountain monasteries is particularly striking in contrast with the extremely rich finds of sculpture made at certain of the sites in the plain.¹

There can, of course, be no question of attributing the disappearance of the sculpture to any but human agency. Even if we were to suppose the existence of a natural force capable of breaking the stone up into small fragments, we should still have to account for the absence of fragments and debris. The simplest explanation would be, no doubt, that the monasteries have been denuded by the repeated diggings of local men during the last hundred years. Enough has been said above of such activities to show that they are indeed responsible for the disappearance of some of the sculpture. On the other hand, the surface conditions at many of the places in which we dug were quite incompatible with recent disturbance.

Still less is it possible to invoke the depredations of Hun or Muhammadan. It is possible to imagine that these invaders toiled up the hills of Swat to vent their hatred on the monastery idols, but not that they laboriously removed them. Unlike our coolie who ran down the steep two hours' descent from Amluk with a Buddha weighing several maunds strapped to his back, they had no incentive to do so.

The conditions discovered by Sir Aurel Stein at Sahri-Bahlol,² where huge quantities of sculpture evidently not intended for that monastery had been dumped round buildings already possessing their own decoration, has led to an interesting theory being put forward to account for the bareness of the monasteries in the hills. It is suggested that the decline of Buddhism in Swat, as witnessed by Hiuen Tsiang's tale of 1,400 deserted monasteries, led to a gradual

¹ During over two months' excavations of monastery sites in Swat, the total number of stone and stucco fragments unearthed was not much over 150. From one courtyard at Takht-i-Bahi already dug by Sergeant Wilcher, Spconer (A. S. R. vii, p. 135) recovered 472 fragments of stone alone, and at Sahri-Bahlol (A. S. R. vi, p. 106) he dug up nearly 300 fragments from one mound.

² A. S. R. xi, p. 101.

'retreat' to the settlements of the plain—a movement in which not only the human but the stone population of the monasteries may have taken part. It is certainly an attractive picture—the monks stripping their mountain homes of the statues they had been used to worship, and carrying them down the valley to be set up in a new shrine. Such a theory gains some slight support from the prevalence of stucco ornament in the later phases of Gandhāran work, which may suggest—though other explanations are of course possible—that the main quarrying sources for the stone were at that time no longer available. If no new stone was being worked, 'imported' stone sculpture might be the more welcome. Nevertheless, this reconstruction of what happened must, owing to the vagueness of the historical background of the period, remain no more than a possible hypothesis.

Of the objects that were unearthed, it cannot at present be said that they contributed much positive evidence towards a reconstruction of the Buddhist civilisation of the Frontier. It must, of course, be admitted that monastery sites offered little chance of providing such evidence as might help to bridge the gap between religious sculptures and domestic objects more or less dateable either in themselves (*e.g.*, coins) or because of the context in which they have been found elsewhere. Charbagh, a domestic site, seemed to offer some possibility of finding both objects of the kind described and a certain amount of schist, like the comparable site of Sari Dheri near Charsada. In this, however, it proved disappointing.

The most satisfactory of all kinds of evidence, the written word, was almost totally lacking. None of the sculptures was inscribed, and the coins that came to light were too few, or their context too insignificant, to form any basis for chronological theory. Sir John Marshall's scheme for dating Gandhāran monuments, according to the type of masonry employed, cannot profitably be applied in Swat, since the masonry used in most of the buildings there defies classification with any of the four styles suggested to Marshall by his excavation of the Dharmarājika Stūpa at Taxila. One of the best preserved examples of the masonry type most common in Swat is the domed shrine at Gumbat (p. 16 above). As will be seen from the illustration in Fig. 6 of Sir Aurel Stein's 'Tour in Upper Swat', its walls are faced with large, neatly squared blocks laid in regular courses with very little packing of thin slates either laterally or between the courses. Possibly this might be regarded as a variation of the 'large diaper' style which Sir John Marshall associates with the 2nd century A.D. It is, however, far more regular than the kind of masonry represented in his drawing¹ or, for instance, in the stūpa (P), north of the Dharmarājika stūpa, illustrated in the same volume². If we are to speak of types, the Gumbat masonry is of a type distinct from those examples. The unusual type of stone facing of the main stūpa at Amluk has been dealt with above. The base of the small stūpa containing a niche at Amluk was faced with large blocks with a very thin layer of packing between the courses (see Plate II, 3). In the forts of Kalungai, the packing of slates

¹ A. S. R. XII, p. 13, Fig. I.

² A. S. R. XII, Plate 13.

between the courses was either very thin or dispensed with altogether. We saw no examples of the 'semi-ashlar' type of masonry so common at Taxila, and said to have come into fashion at the close of the 2nd century A.D.¹ In the light of Fa Hien's report of the flourishing state of Buddhism in Swat in the 5th century A.D., it is highly probable that new monasteries were being built there at that time, or at least that the old ones were being repaired. If so, we must suppose either that the chronological scheme based on the buildings at Taxila is not necessarily applicable elsewhere in Gandhāra, or else that that scheme itself needs revision.

Unfortunately any chronological hypothesis arising out of the season's finds can be built only on stylistic comparisons, always dangerous ground and never more so than in dealing with Gandhāran problems. If the fragments recovered may be taken as representative of the monastic sculpture of Buddhist Swat as a whole, the excavations established that this cannot readily be differentiated from the generality of Gandhāran sculpture. The figures, with one exception, discussed above (p. 21, No. 58), approximate to well-known Gandhāran types, and most of the friezes could be closely paralleled from one or other of the sites of the plain. A study of them, indeed, reveals various new details of iconographical interest; the outstanding group of Hellenistic friezes from Gumbat² provides some fresh and striking examples of the copying of Mediterranean motifs; but in general, the Swat sculptures add nothing to our conception of the Gandhāran style or styles, and their possible bearing on questions of date.

In view of the tendency among some experts to distinguish the products of the Gandhāran and a later Indo-Afghan school of sculpture, the former working predominantly, though not of course exclusively, in stone, and the latter in clay and lime composition,³ it may be worth noting the circumstances in which stone and stucco were found together in Swat. Lime composition fragments were discovered at three of the monasteries, Kanjar Kote, Gumbat and Abarchinar. In none of these sites was there any *prima facie* reason for supposing the stucco to be much, if at all, later than the stone. At Kanjar Kote and Gumbat the stucco fragments were confined to small heads and other details from the mouldings round the small stūpas, which were almost certainly originally surmounted by the carved stone *harmikās* found on the pavement between them. The stucco decorations may, of course, have been added later, but one would rather expect a votive stūpa to be decorated all at one time. At Abarchinar stucco was confined to the remains of one stūpa, where no stone fragments were discovered. This stūpa was identical in plan with another stūpa at the site, which was evidently decorated with schist, and these two buildings were probably contemporary. The stucco heads themselves, though not directly comparable to stone types, have by no means the appearance of being products of a different school.

The only positive chronological indication which emerged from the season's work—that based on a comparison between the Amluk Buddha head and certain

¹ A. S. R. 1912-13, p. 12.

² See p. 17 above, and Plate III.

³ Sir John Marshall's conclusions are summarised by Vogel in 'Revealing India's Past,' 1939, p. 148.

heads from Mathurā—has already been dealt with.¹ The date suggested above for this head, 2nd—3rd century A.D., does not of course necessarily apply even to all the remaining sculptures of the same monastery, though the small size of Amluk, its seclusion, and the absence of any evidence of development in the building, favour the presumption that the life of the monastery was probably not more than about a hundred years.

For the rest, it is hoped that the sculptures brought back from Swat—the first well-documented collection to reach museums from excavated sites in the hill tracts of the Indian Frontier—may prove useful material to future students of the Gandhāran period.

¹ See above, p. 21; No. 156.

CHAPTER VI.

Explorations in Afghanistan.

Journey to Kabul.—Two members of the expedition (Barger and Emanuel) left the camp at Barikot early on the morning of August 1st. We jogged down the valley in the Swat State dak lorry which runs every day to Chakdara Fort, and after an exchange of greetings and news with the solitary British officer in charge of the garrison, we packed into a motor-bus which took us on to Malakand and Peshawar.

On August 3rd we crossed the Khyber in the Afghan Government lorry, which brings the mail from Kabul to Peshawar two or three times a week. Sitting beside the driver, we were spared the discomfort of being bumped about between the floor and the roof of the narrow passenger compartment behind, for the mail-lorry is a light vehicle and attacks these rough roads with the vigour of an express train. The Afghan Frontier on the further side of the Khyber Pass, 39 miles from Peshawar, was reached in an hour and a half, and at that rate of progress we should have covered the rest of the 140 miles to Kabul by nightfall. But we spent several hours at the frontier post, and later there were a number of pleasant stops for refreshment and sleep. We spent the night on our camp-beds by the roadside at the village of Gandarmak, and reached the Customs House at Kabul at noon the following day, exactly according to schedule.

Preparations in Kabul.—We stayed ten days in Kabul as the guests of the British Minister, Lt.-Col. Sir Kerr Fraser-Tytler, and Lady Fraser-Tytler. Our hosts can rarely have had more grateful guests; their hospitality and that of the members of the Legation staff was particularly welcome after the Spartan discipline of our camp in Swat. The prospects when we arrived in Kabul were still far from bright. For although the Afghan Government had frequently expressed their good will towards our project during the long negotiations that Sir Kerr Fraser-Tytler had conducted on our behalf, it was only a month since they had been forced to the conclusion that, for various political reasons, they could not welcome a British expedition this year. However, having at last got across the Khyber pass, the difficulties, so large when seen from London or even from Peshawar, were resolved after one conversation with the Afghan Foreign Minister, H. E. Sirdar Faiz Muhammad Khan. He once again put our proposals before the Prime Minister, H. R. H. Sirdar Muhammad Hashim Khan, whose hospitality we had enjoyed in a previous year on a visit to Herat. A week later the British Legation was informed that permission had been given for us to start for the north. If our tenacity had at last been rewarded, that was mainly due to the scholarly understanding of H. R. H. the Afghan Prime Minister, of H. E. the Foreign Minister, and of H. R. H. Sirdar Muhammad Naim Khan, the Minister of Education, who, through his Department, carries out

with great energy the responsible task of supervising the conservation and exploration of the antiquities of Afghanistan. With the road to the Oxus in front of us, we did not spend many hours in taking our leave.

Since we knew that it would be essential to carry our entire equipment in one motor-car, we had brought with us the minimum for such a journey. We had one tent which, as it never rained, we did not use, camp beds and mosquito-nets, a suit case, a rucksack and a bedding-roll each; a medicine-chest and a case of photographic apparatus, books, papers and maps. We were lucky enough to hire in Kabul a new 20 h. p. Chevrolet car, with a capable Kabuli chauffeur, who knew some, though not all, of the roads along which we were going to travel. It is a tribute both to the car and the chauffeur that we covered over 2,000 miles in difficult territory without so much as a puncture. Our party numbered five, for besides ourselves there was an Afghan interpreter, M. Ahmed Ali Khan Khozard, of the Afghan Academy, a collaborator of M. Hackin's, whom the Minister of Education had arranged should accompany us, our servant, and finally the chauffeur, Hassan. With our baggage we were a heavy cargo for a five-seater car, especially as, for long stretches, we had to take a thirteen-gallon petrol tank inside the car, which meant that one of us had to sit on top of it and risk being bumped against the roof.

Crossing of the Hindu Kush.—We set out on the morning of August 14th, and after making a long detour over rough tracks to visit the site of M. Hackin's excavations at Begram, an ancient city marked by a series of undulations and mounds covering a large area at the northern extremity of the plain of Kapiśa, we camped that night about half way up the Ghorband Valley on the southern flank of the Hindu Kush.

About five years ago the Afghan Government completed a magnificent motor-road across the formidable mountain-barrier which shut off Southern Afghanistan from Afghan Turkistan, and an effort is made to keep it open all the year round. Although it is the first and only link for wheeled traffic between Kabul and the Oxus plain, the way which it follows beyond Bamiyan, down the gorges of one of the main feeders of the Kunduz river, is not even marked as a camel track on our latest maps. The Shibar Pass at the top of the Ghorband Valley, which divides the watershed of the Indus from that of the Oxus, is about 10,500 feet high. This is, therefore, probably the highest motor-road in Europe or Asia. We reached Bamiyan (147 miles from Kabul), where the Afghan Government have built a comfortable rest-house, on the second afternoon. After a day's visit of the caves in front of which the two colossal Buddhas stand guard, we left the Buddhist pilgrim route from Kabul and Kapiśa to Balkh, and pushed on next day for seventy miles along the new road to the Oxus. It wound through gigantic defiles, through which no caravan had been in modern times until the road engineers forced their way; there are, however, a few traces of mediæval Islamic fortification. The next day took us through the foothills and out on to the plain at the village of Pul-i-Kumri, where the road forks. One branch goes north-west viâ Haibak to Mazar-i-Sharif and Balkh (this is

the more important branch for it carries traffic to and from the Russian frontier), and the other north-east to Khanabad and Badakhshan. We struck out along the latter, and though the road was often not more than a track, we reached Khanabad that evening (August 19th), having covered 143 miles that day, and a total of 414 miles from Kabul. There our work was to begin.

Ancient Bactria.—Ancient Bactria was the plain, now partly a desert and partly covered with thorn and camel-scrub, between the Hindu Kush and the Oxus. It was bounded on the east by the Pamir massif, and on the north-west it was joined to the vast Eurasian steppe by Margiana (with its capital of Merv) and Sogdiana (Samarkand), marginal areas of mixed cultivation and pastoral economy. In Bactria the route from the Mediterranean, which ran along the northern rim of the central desert of Persia, and the road from India up the Khyber Pass and the Kabul valley, met the great highways from China by which the silk caravans came to the markets of the Roman Empire and, in the reverse direction, Buddhist missionaries made their way to China.

Some remarks about the history of the Bactrian Greeks have been made in a previous chapter (p. 2). To the materials noted there, archæology has added almost nothing, despite M. Foucher's careful and laborious excavations at Balkh.¹ The Greek kingdoms were destroyed by hordes from Central Asia, the backwash of a great movement of tribes stretching from the Caspian to the Gobi, which we can indistinctly follow in the Chinese sources. The Oxus and the Jaxartes divide the desert from the sown. The Greeks succumbed to the rhythm of Central Asian history; the repeated invasions of nomadic peoples, Śakas, Kushāns, Ephthalites, and Turks, are the chief landmarks in the story of Bactria down to the Islamic invasions, and long after. Precipitated, generally as a part of a much wider movement on the Eurasian steppe, through the Oxus gateway into the settled plains and fertile valleys, some of these hordes reached India to rule on the Ganges, others were checked by the Hindu Kush, or, after crossing that barrier, lost their identity as the Greeks had done before them. How far the rhythm of Bactrian history, this cyclic process of destruction and reintegration, may be accounted for by theories of climatic periodicity is a question which must at present be left to climatologists. The rhythm itself is an obvious fact of history, but the historian at present knows so little about the society, political systems and powers of resistance of the peoples in Bactria and India who were successively overthrown by these nomad invaders, that he cannot usefully contribute to such a discussion.

The sketchy information which we possess about the sedentary peoples who lived in the territories between the Indus and the Oxus in this period suggests that civilisation was repeatedly shaken by the nomads, but it does not appear that its course was fundamentally altered by their inroads or their ephemeral empires. We may perhaps tentatively reconstruct circumstances such as these:

¹ M. Foucher excavated at Balkh with a large army of workmen for eighteen months (1923-25). His detailed report will shortly be published in the *Mémoires de la Délégation française en Afghanistan*. His general conclusions will be found in his 'Etude sur l'art bouddhique de l'Inde' (Tokyo, Maison franco-japonaise) pp. 57-62. He told the Congress of Orientalists at Oxford that in the "Mother of Cities" he had found "absolutely nothing".

The chief result of a nomad conquest was probably a change of masters. Trade continued to ebb and flow; silk and other products of the East were still in constant demand in Rome and later in Byzantium. It was more profitable for new rulers to tax trade than to destroy it. Cities like Balkh survived the deluge, paying tribute perhaps to shepherd kings whose followers were adequate in number to form a ruling caste, but not numerous enough to resist eventual absorption by the higher civilisation of the settled agricultural people whom they had attempted to dominate. The Kushans, for instance, were almost immediately converted to Buddhism. Hiuen Tsiang, who traversed these regions just fifty years before the Islamic invasions, speaks, it is true, of the savagery of the Ephthalites; but the pious traveller still had the pleasure of recording the existence of some thousands of Buddhist monasteries as he passed through Bactria and Gandhāra. In his time the Turks were content with a general supremacy over a large number of petty kings, not all of whom were Turks. It was left to Genghis Khan to earn the title of the "Great Destroyer".

Methods of Work.—In making an archaeological exploration in Badakhshan our objects and our methods had to be different from those of our work in Swat, even though we had some of the same problems in mind. In Swat we had attempted to make an accurate archaeological map of a very small area in which extensive surface remains were known to exist, and we were excavating sites some of which had already been seen by Sir Aurel Stein. The excavations at Taxila were, if not our model, at least a guide, and the objects found could be compared with the Gandhāran collections in our museums. In the north of Afghanistan, we were prospectors in a country parts of which no archaeologist had visited. Our immediate aims were to find out what surface ruins exist, what sites might be worth excavation, and what objects had been found locally; and to study a number of problems of geography, ancient and modern. Our proposed itinerary was determined by the desire to investigate a number of centres where there was some *prima facie* geographical or historical reason to suppose that ancient remains might exist, but our programme had to be extremely elastic. For progress in any section depended on the willingness of the local authorities to remove the political obstacles which have always lain in the way of British travellers on the frontiers of Russian Central Asia. Our methods were necessarily haphazard. We had neither time nor permission to dig, and in any case, excavation is not possible until sites which appear to be worth digging have been found. In every village or nomad encampment on our route, we stopped and asked the inhabitants whether they knew of any ancient sites (*kafir kalas* or "places of infidels"), or whether, in ploughing the fields, or in any other way, anything old had been found. We carried with us a set of photographs of coins, seals and other objects, to show the sort of thing for which we were looking.

It was slow and patient work, sitting for hours in the village conclave over endless cups of tea, exchanging courtesies and trying to convince these simple people that we were not the tax-collector or the conscription-officer in disguise. Much time was of course wasted on false scents; Chinese or Russian coins are all "old" to the Afghans of to-day, and Muhammadan graves or rocks worn into strange

shapes by the weather had naturally aroused what antiquarian interest these peasants and shepherds have. But the Afghan, Turkoman, Tajik, and Uzbek inhabitants all gave us a generous welcome and warm hospitality which we shall not easily forget.

Khanabad.—Soon after leaving Pul-i-Kumri, where the road to Khanabad finally emerges from the foothills of the Hindu Kush, an apparently limitless expanse of steppe-land lay in front of us, occasionally broken by ridges of low sandy hills. Clouds of dust appeared on the horizon from time to time, to take shape as groups of horsemen, or as great flocks of sheep whose skins are the chief wealth of Afghanistan in the world market. It is an empty landscape, somehow fascinating in its very monotony. We had not gone far before mounds began to appear on the horizon at intervals of a few miles. Bactria is dotted with groups of them; some of them are the shapeless remains of ancient cities, others appear to be natural lumps on the plain. The two or three that we examined on this stretch showed no visible signs of ancient occupation. But as cholera was ravaging this part of the country, we were anxious to reach Khanabad before nightfall rather than to camp in the open. It was not, therefore, until we reached Khanabad that our survey began.

Khanabad is a town of recent growth, where not even a single ancient coin relieved the drab monotony of our hunt through the Russian, German and Japanese goods which fill the bazaar. But it is a pleasant little provincial capital, with a small Government rest-house contained in the building of the municipality, which has a quiet garden. The Governor-General of the province of Kataghan-Badakhshan has his residence at Khanabad, and he controls an immense administrative district which stretches on the east to the Chinese frontier on the High Pamirs. An energetic official, with a passion for road-building and many other ways of peaceful progress, he received us with great kindness. After he had entertained us to a sumptuous dinner in his garden, we spent a pleasant evening discussing the politics of Europe and Asia and many other subjects with him until a late hour at night.

Ruins at Kunduz.—We were now about thirty miles from the Oxus as the crow flies, and Kunduz, sixteen miles west of Khanabad, was our first goal. The name is derived from *kuhan-diz* ("strong fortress"). Its older name was *Valvaliz*, probably a word of non-Iranian origin. It was the capital of Tukharistan, and an important centre at many periods. Hiuen Tsiang went there, it is frequently mentioned by the Arab geographers, and a century ago Captain Wood had a good deal to say about the Uzbek chief who had carried off so many of the inhabitants of the Badakhshan uplands to die in the pestilential marshes that surrounded his capital.

The oasis of Khanabad, flanked on the north and east by wind-eroded hills, is a very fertile expanse of about four miles, watered by an irrigation system drawn from the Khanabad river, which comes down from the high Badakhshan mountains. Taking the road to Kunduz, we soon came out upon the now familiar Bactrian steppe, featureless except for mounds which appeared at irregular intervals. Kunduz, which lies about a mile to the east of the river of

that name which we had followed for much of the way from Bamiyan to Khanabad, is a small town, well laid-out with a recently constructed bazaar. Our arrival in a private motor-car created a good deal of excitement in the bazaar, and when we alighted at the largest *tschaikhana* we were soon surrounded by rows of silent, interested faces. Some coins were produced, including a small gold Diodotus. We sat there for a long time, drinking many cups of tea, until our presence and our mission should be noised abroad throughout the town.

Fortunately, our patience was rewarded, and good luck led to a discovery of some importance. An old man who had paid little attention to us, and who had been just one of the expressionless faces in *tschaikhana*, suddenly spoke up, saying that he had something that might be of interest to us, though he could not say what it was. He led us to his house on the outskirts of the town, a substantial dwelling in the shape of a caravanserai. In the courtyard stood the bases of two Hellenistic columns of Corinthian style. He took us further up the street to a pit dug by builders to get earth for making bricks. There, at a depth of ten feet, a third column-base had just been unearthed (Plate IX, 4). This is the first ancient stone work found to the north of the Hindu Kush, indeed the first Greek structural remains seen in Central Asia. Only excavation will show what they are—perhaps the edge of a temple or forum. These column-bases are very similar to the well-known examples at Jandial (Taxila). It does not of course follow that the columns which they supported were of stone.¹ However that may be, this lucky find would appear to disprove the conclusion drawn from M. Foucher's unsuccessful excavations at Balkh, namely that the Hellenistic cities of Bactria, like their successors of to-day, were all built of mud and sun-dried brick, and had therefore left no trace behind. Some sherds of rather nondescript coarse pottery were found at various levels in the builders' trench, and at one point, about six feet below ground-level, the remains of a wall of kiln-dried brick could be seen. The site is situated less than a mile from the centre of the town, about twenty yards to the south of the main road which leads in a westerly direction towards the river. Excavation may not be easy to arrange, for on one side there is a row of houses, and beyond them the main road; on the other side is a large open space on which a number of nomads had pitched their *yurts*, but which may soon be used for building.

On the following day we returned to Kunduz to survey an enormous mound about a mile and a half to the north of the town. It was, with the single exception of Balkh, by far the largest complex of ancient remains that we saw in Northern Afghanistan. It is an oval 'castle' with mud walls about two miles in circumference, which rise about 100 feet above a moat some 30 yards in breadth (No. 11, *Illustrated London News*, April 22nd, 1939). There are four gateways, and the interior consists of a series of shallow undulations or 'mounds' well-rounded by the weather, which indicate the remains of mud buildings. These are aligned along two roads which intersect at the centre, and which connect the four gates. The northeastern end of the site is cut off by a branch

¹ M. Hackin tells us that he has found similar bases in Southern Afghanistan, which are presumed to have supported wooden pillars.

of the Khanabad river which now flows in a north-westerly direction in a deep channel through the ruins. The small segment cut off by the river appears to have been the fortress. Within the walls, on the northern side, there is a tiny village. The floor of the 'castle' is littered with pottery (Plate X). Here, too, builders had apparently been digging for earth, and we were able to creep into a number of holes in the ground and examine walls now buried and no doubt repeatedly built upon. The fortifications on the top of the enceinte, which are of rough construction, are obviously comparatively modern; they still retain the shape of walls. But some of the lower strata were of quite different construction, of carefully shaped kiln-dried brick, which was very reminiscent of Sassanian building. Some of the pottery which we collected from these lower levels proves to be similar to pre-Islamic Persian types which Mr. Pope's survey now enables us to distinguish and even to place in some sort of chronological order. In appearance this impressive ruin is very similar to the Parthian fortress of Takht-i-Suleiman, which Mr. Pope has recently surveyed on the western marches of the Sassanid Empire.¹ From Kunduz a road, along which we were not permitted to travel, runs to the Oxus. Our enquiries elicited the information that close to where the Kunduz river joins the Oxus (about 30 miles from Kunduz), there is a ruined fortress which, though apparently smaller, was described to us as of similar plan. It is called Kalat-i-Zal, a name often associated with pre-Islamic remains. The ruin at Kunduz is a site of which nothing more can be said at present than that it offers great promise for excavation. It may well prove to be one of those strongholds by which the Sassanid kings maintained a shaky hold on the Bactrian frontier, and Kalat-i-Zal may perhaps have been an outlying post commanding the passage across the Oxus.

There is a third site at Kunduz, a mile and a half north-east of the town, which until three years ago might have attracted no more attention than the other mounds dotted over the surrounding landscape. During the autumn of 1936, excavations made for an irrigation canal brought to light a number of fragments of rather mutilated stucco figures, which were sent to Kabul. The local officials, on the instructions of the Governor, dug into the adjoining mound. Without finding any more fragments of importance they uncovered three chambers with apses in the mud walls. M. Hackin paid a brief visit to the site a few months later, when the countryside was unfortunately covered with snow, and he was easily able to recognise the remains of a Buddhist monastery, no doubt one of the ten the existence of which Hiuen Tsiang records in the Kunduz region.² M. Hackin has published an account of the stucco fragments in a pamphlet printed in Kabul.³ Chance has here provided what may prove to be a find of first-class importance, for these seven heads are the first Buddhist sculpture to come to light in the regions north of the Hindu Kush. Buddhism, of course, reached Bactria from India, and the hitherto non-existent Buddhist

¹ Bulletin of American Institute of Iranian Art and Archaeology, V, 1937.

² 'Records of the Western World', p. 288, transl. S. Beal (1884).

³ J. Hackin, 'L'art gréco-bouddhique de la Bactriane' 1937. With the exception of one head which is at Mazar-i-Sharif, all these fragments are housed in the Kabul Museum (No. 3, *Illustrated London News*, April 22nd 1939).

art of Bactria was assumed to be a derivative of Indian models, like that of Hadda or of the Tarim Basin. But these heads from Kunduz are in some ways more "Greek" than any Buddhist sculpture yet found in India, and if some of them look more Central Asian than Greek, they are certainly not importations from India. If M. Hackin is right in dating them as first century B. C. to first century A.D., it will follow that the Buddhist art of Bactria was an independent development. As the historical probability is that Buddhism reached Bactria very early, before the Buddha was personified in stone or plaster at Gandhāra or at Mathurā, it may follow that the first Buddha image was created in Bactria and not in India.

Here again is a site that should richly repay excavation. The mound which covers the monastery is about 70 yards by 80 yards, and it stands upon a low eminence several hundred yards in extent, which rises between 2 and 8 feet above the surrounding plain. The whole of this eminence itself may be of artificial origin. From the shape of the monastery mound and the alignment of the walls which stand out as low banks of earth with a thin covering of grass, there would appear to be two courtyards surrounded by cells, and a large lump at the northern end almost certainly represents a stūpa. The three cells which have been excavated on the western side contain niches, two of them partly covered with plaster and faint traces of decoration.

Journey into Badakhshan.—We set out from Khanabad on August 22nd, having secured the consent of the Governor-General to our travelling into Badakhshan as far as Jurm. As far as Faizabad (137 miles) a road had just been completed, which had come into existence without the assistance of a European engineer or even of a steam-roller. There was no petrol at Faizabad, for there is not much traffic yet, in fact no more than a lorry once every two or three weeks, and we therefore had to take from Khanabad enough petrol for the return journey. As we set out in the afternoon, we covered only 54 miles on the first day, reaching the small village of Farkhar, situated in the valley of that name some 8 miles off the main road, beyond the point where it turns north east to cross a ridge of hills to reach the Kokcha watershed. There we were welcomed by the local Governor, who had been warned by telephone to expect us, and we camped in his garden beside an ice-cold stream. We awoke in the morning to find that we were in full view of the snow-covered summits of the Khwaja Muhammad Range, which traverses Badakhshan roughly from north to south, and which no European has ever climbed. The plain east of the Kunduz river, and especially the area round Khanabad, is watered by a series of streams which flow down the Khwaja Muhammad Range in a westerly direction through a series of lateral valleys. They combine to form the Khanabad river, itself a tributary of the Kunduz river, which it joins close to its estuary in the Oxus. All this region has never been surveyed, and these rivers and the contour of the mountains have been roughly interpolated on the Survey of India map in the draughtsman's office. To reach Farkhar the road had followed one of these valleys through a bleak panorama of eroded hills, with occasional patches of trees and cotton cultivation where the valley opens out.

We left Farkhar early on the following morning, and it took us 12 hours to cover the remaining 92 miles to Faizabad. After crossing the watershed into the Kokcha valley, the road left the old caravan route which ran via Daraim to Faizabad at Kishim, where we had a delightful alfresco meal with the local Governor. The new road cuts its way through the gorges of the Kokcha, parts of which were hitherto impassable even on horseback. It is indeed a formidable engineering feat. Workmen had to be suspended in baskets from the almost perpendicular cliffs to drill holes for blasting. The men of each village are made responsible for completing the section of the road in their district, and above Faizabad, where the road is now being traced to Jurm, we saw the Governor in his shirt sleeves directing his men. The bridges are made of logs covered with rubble, and they have to be renewed twice a year, for each seasonal migration of the nomads' sheep destroys them beyond repair. We made exhaustive enquiries at every village and encampment on this route, but though there were rumours of *kafir kalas* and other possible ancient sites at Rustak, Gumbat and other places in the hills between the Kokcha and the Oxus, we had not permission to leave the road, and when we got to Faizabad the Governor set his face against our exploring these frontier regions. There was nothing of interest to report on the road itself, although we obtained some interesting data about the changes in the seasonal movements of the nomads which have been brought about by Soviet control of the Pamir pastures.

At Faizabad we were the guests of the Governor, whose immediate province includes Wakhan and stretches up to the Chinese frontier on the Wakhjir Pass, and we slept in his well-kept garden. Our host had some sad stories to tell of American and German travellers who from time to time had reached Faizabad in the belief that instructions had been given for them to proceed into Wakhan, and whom he had had to turn back. It was only after some telephone conversation with the Governor-General at Khanabad, that we received permission to proceed on horseback to Jurm. We were the first Englishmen to pass that way since Lockhart and Woodthorpe reached Ishkashim in 1886.

Faizabad, inhabited by Tajiks and a few Uzbeks, lies on the right bank of the Kokcha, in a narrow valley through which the Kokcha rushes in a deep gorge. The town is also broken up by the broad beds of two tributaries strewn with huge boulders, now dry, but which a thunderstorm would easily convert into impassable torrents. On the hills above the town, which are of no great height, there are a number of castles on either side of the valley, which appear to belong to the period of Murad Beg and Dost Muhammad in the first part of last century when so many fortifications were built at strategic points all over Afghanistan. The town itself showed nothing of antiquarian interest, which was not surprising, for the floods which are no doubt caused from time to time by the steep sides of the valley would wash away buildings of mud. When Captain Wood passed through Faizabad at the beginning of last century it was scarcely more than a ruined hamlet of no importance. We found one Greek coin in the bazaar (Euthydemus II); there were, however, a number of other objects of interest—brightly-coloured stockings of curious weave peculiar to the

looms of Wakhan, fire-arms of every sort and age, and hordes of Chinese and Russian coins.

We left Faizabad at dawn on August 26th on our march up the Kokcha to Jurm. Seven horses had been hired through the good offices of the Governor; two of these were for baggage and the rest for ourselves and our military escort, it being understood that the three Tajik caravan drivers were to walk. But these Badakhshan horses are so sturdy (their fame reached the Chinese Emperor at an early date) that for long marches two of the drivers would ride on top of the baggage on one horse. The first stage was a slow one, for the path cut along the rocky cliffs was a rough and difficult one. It was often necessary to lead the horses over boulders, and the river had to be crossed and re-crossed by bridges of logs strapped together and suspended high above the torrent. After about fifteen miles, the valley broadens out to a width of about a mile, although for some way farther upstream the river runs in a trough and cannot be used for irrigation. We camped late in the afternoon at a village called Pa-i-Shahr, just beyond the last of the gorges.

The whole of the north of Afghanistan is frankly marked as "unsurveyed" (which does not, of course, mean "unexplored") on the Survey of India map, except where it shows the results of the two boundary commissions, on the west and in the High Pamirs, and in the far eastern corner, which was sighted by the theodolite of Lieut. (now Lt.-Col.) Professor Kenneth Mason in 1914. It was therefore not surprising to find that the alignment of the Kokcha valley on our map was incorrect, and that Faizabad, for instance, was perhaps 20 miles out of position. For this part of the map presumably goes back to Wood's journey, and to the traverses of those remarkable surveyors Pandit Manphul, who came to Faizabad in 1867, and the Munshi, Faiz Bakhsh, who went to Wakhan in connection with Forsyth's Yarkand expedition in 1870.¹

The Silk Route.—Our chief concern was with ancient geography.² We were on the first stage of the route which goes up Wakha to the headwaters of the Oxus and crosses the Pamirs to Tashkurghan and the Tarim basin, followed by Hiuen Tsiang on his homeward journey, by Marco Polo, and by the Jesuit, Benedict Goes, in the seventeenth century. Sir Aurel Stein, an authority with whose views on the historical geography of the Pamirs it seems almost impertinent to differ, has repeatedly stated that this branch of the Silk Route was of much less importance than the one which ran from Termez on the Oxus up the

¹ These reports were summarised by Colonel Yule in "Papers connected with the Upper Oxus regions". (*Journal R. G. S.* 42 (1872) p. 438 ff.) Cf. *Geog. Journal*, 93 (1939) p. 395.

² When I put the following views on the historical geography of the Pamir region before the Royal Geographical Society, in the course of a paper which I read on this expedition (*Geog. Journal*, 93 (1939) p. 377 ff.), they led to a lively discussion initiated by Professor Kenneth Mason (*ibid.* p. 395-98). Since then I have had the benefit of an extremely valuable discussion on the subject with Sir Aurel Stein, who has, in particular, drawn my attention to two relevant factors which I had neglected in my attempt to appraise the respective importance of the routes across the Pamirs. One is that the feasibility of a route is determined less by the height of the pass or the length of the approach, than by the existence or absence of gorges, which, at some point, may render it impracticable for beasts of burden for a great part of the year; the other is that a route practical for large caravans, armies or nomadic movements, must have pasture throughout the greater part of its length. The evidence is at present so scanty that no more than a working hypothesis is possible. If I repeat here my views on some of the questions affecting the 'Silk Route', my object is only to summarise some considerations which might be borne in mind by future workers in this area, to which I myself hope to be able to return.—E. B.

valley of the Waksh, through the broad valley between the Alai and the Trans-Alai, and past Irkistam, the present frontier station, down to Kashgar.¹ This theory goes back to Yule's² and Richthofen's³ reading of Ptolemy,⁴ and after securing the weight of Dr. Herrmann's authority⁵ it has since been generally accepted as if it were an historical fact. It is of course true that the Alai valley is a "natural highway", and Sir Aurel Stein's explorations have proved that this is the route which Ptolemy appears to describe, even if we may never know the exact position of the "Stone Tower". But to say that Ptolemy refers to the Alai valley is one thing; to argue from such premises that the main trade route passed that way for many centuries is quite another. Ptolemy's geography of the regions beyond the Pamirs is so confused that it is hard to make sense of it. His information, obtained at fourth hand and apparently from a single expedition of merchants, hardly provides a secure foundation for generalisations about the whole of ancient and medieval trade.

There are a number of reasons for thinking that the Wakhan route may have been nearly as important as the northern route, and in discussing them it must be remembered that this is not only, or even primarily, a question as to which way the silk came to Persia and the Mediterranean; we want to know how, in the reverse direction, Buddhism went from India to China, how, for instance, the plaster sculpture of Hadda got to Khotan. To begin with, we can, perhaps, exclude the passes over the Karakoram as a route along which Buddhist civilization may have travelled. There is no evidence that the Karakoram pass was used in ancient times, and Fa Hien's account of the Gilgit road reads like a piece of exploration. But more decisive than negative evidence is the fact that the archæology of Kashmir is provincial; it is a local derivative from Gandhāra, and not an intermediate stage between Gandhāran or Hadda prototypes and the Buddhist art of the Tarim basin. The route up the Kunar valley and over the easy Baroghil pass to the headwaters of the Oxus, which Sir Aurel Stein followed on his second Central Asian expedition,⁶ might be considered, but two wrecked stūpas at Gilgit and a rock carving at Mastuj are not much evidence. Had this been a main road, for trade or pilgrims, it seems likely that something more substantial would have come to light at Chitral during forty years' occupation by British troops.

It seems clear that the main route from India and the Kabul valley to the Tarim basin lay across the Pamirs. Now Wakhan was much nearer the Khyber than the Alai route which ended at Termez, for it could be reached through the valleys of Kafiristan, many of which are still unexplored. A caravan driver assured us that a good horseman could ride from Jurm to Kabul, via the Anjuman

¹ *Geogr. J.* 65 (1925) p. 381; 'Ancient Khotan,' I, pp. 54 ff.; 'Innermost Asia,' II, pp. 847 ff.; "On ancient tracks past the Pamirs;" *Himalayan J.* 55 (1932), pp. 21-4.

² H. Yule, 'Cathay' 2nd ed. by Cordier, 1915, I pp. 190 ff.

³ Richthofen, 'China,' I, pp. 497 ff.

⁴ Ptolemy, *Geog.* I, xii.

⁵ A. Herrmann, 'Die alten Seidenstrassen zwischen China und Syrien' (1910), map; 'Das Land der Seide und Tibet im Lichte der Antike' (1938), pp. 105 ff.

⁶ 'Serindia,' I, pp. 30-72; *J. R. Asiat. Soc.* 1910, p. 37.

and the Nawak pass, in three days. There is still much traffic on this route. For a caravan coming from China round the southern rim of the Tarim basin, Wakhan is the shortest route from Khotan to Bactria or India. The northern oases of the Tarim basin were frequently subject to raids and temporary occupation by invaders from the Dzungarian steppe, and again Kashgar was naturally and easily occupied by invaders from Ferghana, as it was by the Turks. To such general historical and geographical considerations we may add the fact that in the seventh century Wakhan was for a time a Chinese administrative district. But the archaeological evidence is of much greater weight. The fruits of Sir Aurel Stein's reconnaissance in the Alai valley were some old cultivation terraces, a mound or two and the remains of a few stone buildings.¹ Wakhan, on the other hand, is known to be full of fortifications, buildings and caves, which Sir Aurel Stein believed to be of Sassanid date, and among which he has also found traces of Buddhist worship². No site in Wakhan has yet been excavated, and in a sense the valley has never been explored. The route through Wakhan has always followed the southern bank of the Oxus, for the floor of the valley is broader there, and the chief settlements mostly lie on the south (or Afghan) side. Sir Aurel Stein and Olufsen³ have explored the Russian bank, but no record exists of any traveller who has been on the Afghan side of lower Wakhan since Wood made his famous journey to the sources of the Oxus in midwinter exactly a hundred years ago⁴.

Thorough excavation of some of the ancient sites in Wakhan must be perhaps the most important single item on any agenda of archaeological work in Central Asia, and there is every hope that the progressive and liberal spirit which animates the present Afghan Government will allow it to be done. On our journey up the Kokcha, we made a discovery which strengthened the conviction that the Wakhan was an extremely important route.

Ancient Remains at Baharak.—On leaving the hamlet with the significant name of Pa-i-Shahr ("foot of the town"), where we had camped after the first day's march from Faizabad, we came across remains of undressed stone, strewn along the valley for a distance of about two miles. It was not always easy to trace the exact extent of the ancient site, and only here and there, chiefly in the entrances to the side valleys, was it possible to make out the plan of the buildings with any certainty (No. 5, *Illustrated London News*, April 22nd, 1939). For the stones had frequently been cleared away and built into walls supporting recent terraced cultivation, and occasionally they had been piled up to make sheep enclosures. But there can be no doubt that this is the site of a large city, almost certainly that of the ancient capital of Badakhshan. Judging from a map, it lies exactly where one would expect to find it.

¹ 'Innermost Asia,' II, p. 847.

² *Ibid.*, pp. 863-76.

³ F. Olufsen, 'Through the unknown Pamirs,' 1904.

⁴ Sir Aurel Stein crossed the Baroghil saddle and surveyed the uppermost part of the valley from Sahrad to the Wakhjir pass ('Serindia,' I, pp. 60 ff.). Colonel T. E. Gordon visited the part of the valley between Kila Panja and the Little Pamir lake ('Roof of the world,' 1876).

Just beyond the end of these remains the valley opens out into a fertile plain, triangular in shape and some 6 miles by 4 miles at its greatest extent (Map, Plate XI. 5). Here the Kokcha receives two affluents, the Warduj, from the south-east, which the route to Wakhan follows as far as Zebak, and another from the east. The village hidden by luxurious fruit trees on the farther edge of the plain, at the entrance to the Warduj valley, is called Baharak, a name long associated with the ancient capital. "Khairabad", placed at this point on our modern maps, which attribute to it a post office, has disappeared, both as a place and as a name. Farther on, in the mouth of the Warduj valley, at the spot where the traveller coming from the east might feel that he had at last emerged from the Tsungling mountains, are two mounds of roughly hewn stones, which have the appearance of wrecked stūpas. They are known locally as *kafirkalas*, although the nearer we get to modern Kafiristan, the greater the caution necessary in attributing importance to this name. The plain of Baharak itself would have been an unsuitable site for a city. Its extreme fertility would have been wasted, and again it could have been attacked from four sides. The town built in the narrow valley just off the plain commands the route leading from Faizabad to the Warduj and Wakhan, and the extent of the ruins illustrates, it may be thought, the importance of that route, to which reference has already been made. Holdich¹ discussed the position of Idrisi's "city of Badakhshan" at some length, and finally came to the conclusion that it was more likely to have been Jurm than Faizabad. Neither of these places could have supported a large population, for they are situated on narrow rocky shelves, between the river running in a gorge and the steep sides of the valley, and corn would also have had to have been brought from a distance.

Breaking camp at Pa-i-Shahr very early, we spent the morning in examining the scattered ruins and proceeding slowly to the village of Baharak, where we camped in an apple orchard. A derelict pavilion, with a veranda and columns (wood, coated with plaster) with lotus capitals, stood among the trees. It was said to have belonged to a general who died thirty-five years ago. Approaching Baharak, we had distant glimpses of the Pamir summits beyond the head of the valley to the east, and of the Hindu Kush up the Warduj Valley to the south-east. Chitral, according to our caravan drivers, was less than four days march via the Dorah pass, and Ishkashim, at the entrance to Wakhan, rather less. Baharak has all the famous fruits of Badakhshan, and indeed apples are sent all the way to Kabul, where they fetch fabulous prices in winter.

Jurm.—On the following day, we covered the 13 miles to Jurm in four and a half hours. The caravan track first follows the Warduj valley for three miles until the valley narrows and the stream can be crossed by a rickety bridge. Soon after regaining the Kokcha, this river is crossed, and the track is carried on a cliff high above the stream for most of the remaining five miles to Jurm. Jurm is a large oasis in a rather empty, dusty valley. The houses are scattered

¹ Sir Thomas Holdich, 'The gates of India,' pp. 273-4 (1910). Holdich did not notice that Idrisi was uncritically repeating Ibn Haukel's itineraries, with a few inaccurate interpolations which are the source of much of the confusion in his itineraries. (Idrisi (ed. Jaubert), I, pp. 474-75). Ibn Haukel (ed. Ouseley), pp. 230-31.

among gardens watered by trickles from the snows of the Khwaja Muhammad Range which towers above, unseen from Jurm owing to the steepness of the sides of the valley. The bazaar is small, and provided nothing more interesting than a few Sassanian coins.

Return to Khanabad.—After a day's stay at Jurm, we rode back to Faizabad by the way we had come, having abandoned a plan to take the alternative route via Daraim, owing to the amount of snow said to be on the pass above Jurm, over a saddle of the Kwaja Muhammad, which caused anxiety to our escort. We did the march from Baharak to Faizabad in one long stage. Although we found no remains of interest except at Baharak, those days we spent riding through the uplands of Badakhshan, close under the Roof of the World, with distant views of glimmering white summits, were among the pleasantest of our travels in Afghanistan. It was unfortunate that we did not have permission to leave the main route, part of which, where it winds along the Kokcha below Faizabad, does not follow an ancient highway. A thorough archæological exploration of northern Badakhshan, the hilly triangle between the Kokcha and the Oxus, and of the Anjuman south of Jurm, should produce interesting results. Although there has recently been some distinguished work done on Arab geography of the Oxus basin,¹ it is strange to think how little, if at all, our knowledge of the existence and location of ancient sites has advanced since, by the study of place names and by using reports now lost or buried in the archives in Delhi, Sir Henry Rawlinson collected so much information for his 'Monograph on the Oxus.'²

We spent a further day at Faizabad, before taking leave of our kind host, the Governor, who, by readily placing his knowledge of the country at our disposal, as well as in other ways, had done so much to assist our enquiries. On September 1st we motored back to Khanabad, covering the 137 miles in seven and a half hours. Shiva Lake, above Faizabad, was said to be already frozen and nomads were on the move, streaming down the valleys to lower pastures on the plains. The heat of the Oxus plain was now less oppressive. We spent two more days in Khanabad, in the hope that, as our purpose was now familiar to almost everyone in the bazaar, some useful information about ancient sites might reach us.

Tashkurghan.—Our next objective was Tashkurghan. Passing through Kunduz, we found that our friends the builders had not brought anything more to light while we had been away. After our car had been ferried across the Kunduz river, most of our way lay across empty steppe and flat desert which stretched to the Oxus, vast tracks of sand and scrub, now uninhabited, but which show traces of ancient irrigation. From a ridge of sandy hills which the road crossed at an altitude of about 1,000 feet above the plain, we had a distant view of the Oxus, here about eight miles distant, with the mountains of Russian Turkistan which flank the Iron Gates in bold silhouette beyond.

¹ J. Marquart, 'Eransahr' (1934), 'Wehrot und Arang' (1938). V. Minorsky, 'The geography of Hudud al Alam,' (Gibb Memorial Series, 1937).

² Journal R. G. S. 42 (1872) esp. 507 ff.

We reached Tashkurghan, 92 miles from Khanabad, after dark, and lodged in the garden of a palace of Abdurrahman, usually used as a rest-house, but which had been transformed into a cholera quarantine station for passengers on the road to Mazar-i-Sharif. An Afghan doctor with a staff of assistants was hard at work inoculating the villagers by touring a wide area.

We spent three days at Tashkurghan, a large town nestling under the rocky foothills of the Hindu Kush which have here been eroded into fantastic shapes. It is here that the junction of the road from Khanabad meets the great north road from Kabul to Mazar-i-Sharif, which emerges from the mountains through a long defile having the appearance of a cleft in the rock. The suburbs of the town are well watered by a stream from the hills, which, being absorbed by irrigation systems in the immediate vicinity of the town, is soon lost in the desert. Indeed, of the many rivers which flow onto the plain from the northern flank of the Hindu Kush, only the Kunduz river reaches the Oxus. Four or five miles beyond the town the cultivation patches come to an end, and a belt of desert stretches as far as the Oxus. It was at Tashkurghan that M. Hackin, on his way to join M. Foucher at Balkh fifteen years ago, had purchased in the bazaar a number of very small terra-cotta figurines, which were said to come from Shahr-i-Bannu, a site some distance out in the desert. Accordingly, we decided to comb the bazaar, a very large covered emporium, with some care. We found no terra-cottas, but our labours were rewarded by a number of Greek and Sassanid seals (Plate X. 2), and a very large number of Greek and Kushān coins, among which those of Soter Megas, that anonymous but ubiquitous king, predominated. The ruins of the mediæval town of Khulm cover a large area in the desert about six miles to the north-east of the town. We made an excursion on horseback to the complex of mounds known as Shahr-i-Bannu (No. 7, *Illustrated London News*, April 22nd, 1939), from which most of the seals and coins in the bazaar were said to come, an arduous day's ride of over 25 miles in the desert. Although the mounds had been washed flat by the weather, they showed traces of mud walls and were covered with Islamic pottery of various types; a detailed description is, however, unnecessary, for M. Carl, of the French Delegation, began excavations there, on instructions from M. Hackin, a few weeks after our visit.

Mazar-i-Sharif.—We reached Mazar-i-Sharif, the capital of Afghan Turkistan, 36 miles west of Tashkurghan, on September 7th. It is a modern town which has grown up round the chief shrine in Afghanistan, a noble building of the Timurid epoch. The rooms in the building of the municipality have been devoted to a museum. The collection includes a large number of coins, one of the heads from the Kunduz monastery, three small plaster heads said to come from Shahr-i-Bannu and about fifteen Greek and Sassanid seals, depicting gods, human figures and animal types similar to those of our collection. The Governor of Afghan Turkistan received us with great cordiality, and appeared warmly interested in our proposal to go to Sar-i-Pul, 125 miles to the south-west, in order to spend some days in reconnoitring the valleys to the south of that place, where, a hundred years ago, Ferrier reported the existence of Sassanid rock-carvings which no traveller has since seen. We reached Sar-i-Pul without in-

cident, but, owing to circumstances beyond our control and that of the local authorities, we had no opportunity of attempting to solve this problem, and were forced to return by easy stages to Balkh.

The Ruins of Balkh.—Balkh is a wilderness of mud walls of uncertain age, eleven miles to the west of Mazar-i-Sharif (Plate IX. 1; Nos 6 and 8, *Illustrated London News*, April 22nd, 1939). Our thoughts, as we arrived there, were with M. and Mme. Foucher, who came to Balkh from Kabul immediately after the French Government had secured the concession for archæological work in Afghanistan. The journey which we had made by motor car took them many weeks on horseback, and they lived there for eighteen months in an extremely malarious climate, alone in a country as yet unaccustomed to the presence of foreigners. If their efforts were not crowned with success, such a tremendous undertaking so gallantly carried through has placed M. and Mme. Foucher's labours in the front rank of Central Asian exploration. M. Foucher found that the stūpa, 200 feet high, described with such a wealth of detail by Hiuen Tsiang, had become simply a huge cake of mud (No. 2, Plate facing P. 389, *Geog. Journal*, 939, 1939). The walls of Balkh are seven miles in circumference, and it is idle to hazard an opinion as to whether, if M. Foucher had dug deeper, or at some other spot, in that great area covered by walls, mounds and rubbish heaps, he might not have found something more substantial under the mud of successive ages. Greek coins are certainly numerous in the bazaars of Balkh, and indeed, until six or seven years ago, when the Afghan Government introduced its first paper currency, they were often common tender.

Ancient Sites on the Plain West of Balkh.—On the return journey from Sar-i-Pul, between Shibarghan and Balkh, a stretch of 75 miles, we spent several days in examining and plotting on the map a very large number of mounds (Plate IX. 3). Progress was slow, for we often set out for mounds on the horizon which proved to be several miles away from the road. Standing on the top of one mound, it was sometimes possible to see as many as a dozen others scattered over the wide horizon. From about a tenth of these sites we were able to bring back an assortment of pottery types (Plate X. 1). Most of these sherds are variants of the slip-painted ware, usually described as Transoxianian, ninth and tenth centuries, and of the splash-glazed wares called early Islamic, but which cannot easily be classified in detail or arranged in chronological order. Chronological argument is often defeated, not, as in India, by the conservatism of the potter, but by the inadequacy of our knowledge and of comparative material such as could only come from the excavation of a large number of sites in Iran and in the Oxus regions.

The mounds are mostly found in groups, for the larger tumuli usually have a number of smaller dependencies. Surface finds of pottery were naturally richer on those mounds which have steep sides, where any shower of rain might easily wash away a layer of earth, rather than on the mounds which were already well-rounded by the weather. By relating the topographical data to the pottery, we hope that we have been able to decide which mounds or types of mound have the semblance of antiquity and would therefore warrant excavation. The frequent existence of moats suggests that many of them were used for mediæval

or more recent fortification. But somewhere underneath some of these shapeless ruins, many of which are the mud of which later cities were built, there must be Greek structural remains of stone, at least column bases such as we found at Kunduz. Chang K'ien (128 B.C.) found Bactria to be a land of walled towns,¹ and in Ferghana, the Greek occupation of which was until recently in doubt, he speaks of "fully 70". The difficulty is where to begin looking for them. Classical writers only supply with certainty two names of cities in Bactria and two in Sogdiana, and a Sanskrit source perhaps adds a fifth; of these five the position of two is uncertain,² and only Balkh lies within the boundaries of modern Afghanistan. Dr. Tarn may be right in saying that most of the towns seen by the Chinese were military colonies or large villages walled with mud. But excavation at Kunduz, or at least one of the sites noted below, may possibly show what a Bactrian town of which there is no mention in Classical writers was like.

It is impossible to give here more than a summary list of the most interesting of the sites which we examined on the plain west of Balkh. Distances refer to mileages on the road from Shibarghan via Akcha to Balkh, proceeding east. Index letters are those we used for identification of the site and its pottery.³

MD. 3 miles from Shibarghan, about 250 yards north of the road, a circular 'castle' similar to that at Kunduz, but smaller. Walls one mile in circumference, 35 feet high outside and 25 feet inside. The interior shows a marked absence of small mounds and undulations such as cover the floor of the 'castle' at Kunduz. No vegetation on the ramparts, though signs of cultivation in the interior. A great deal of coarse pottery, but no early painted pottery on the surface.

ME. 9 miles from Shibarghan, immediately to the south of the road (Plate IX. 3). Complex of mounds and ruined mud walls surrounded by debris, called Yuroghli. A square mound with the appearance of fortress is surrounded by a ditch and an outer wall. The 'fortress' has steep, flat sides, 40 feet high, and it measures 300 yards each way. The top is not flat, but consists of a series of dents and 'mounds'. On the south side, remote from the road, is an area covered with mud walls which appear to be of comparatively recent date. The steep sides of the main mound ('fortress') were covered with sherds of all types, containing a high proportion of the early-Islamic slip-painted wares.

MG. 7 miles from Akcha (proceeding towards Balkh), one mile north of the road, a lion-shaped mound 60 feet high, well rounded by the weather. Two or three smaller mounds within 100 yards. No pottery. 200 yards to the northeast, is the beginning of an extensive system of ancient irrigation channels now dried up (Plate IX, 2).

MK/K. 13 miles from Akcha. 200 yards to south of the road. Table—mountain shaped mound, 50 yards \times 50 yards, 50 feet high. Surrounding it, a shallow moat and an outer wall 3 feet high. Round the mound, outside the moat, undulations suggesting collapsed buildings. On the top only coarse

¹ F. Hirth, "Translation of the Shi-ki of Ssu-ma Ch'ien" [*J. Amer. Orient. Soc.* 37 (1917) 89 ff.].

² Summary of the evidence in Tarn, "The Greeks in Bactria and India", p. 118 (1933).

³ The collection of pottery has been divided between the Victoria and Albert Museum, and the Indian Institute at Oxford.

pottery and some common modern types. On the lower levels of the steep sides a distinct stratum of early Islamic pottery (slip-painted with one or two splash-glazed specimens) and also a few fragments which are possibly Sassanid types.

ML. 15 miles from Akcha, 250 yards south of the road. Rectangular mound 40 yards×50 yards, 50 feet high. Top covered with a series of bumps (10/20 feet high). A number of small subsidiary mounds and low undulations covering a considerable area round three sides of the base. Painted pottery of most types found all over the central mound, though not on the small adjacent mounds.

MN. 21 miles from Akcha, immediately to the south of the road. Extensive area of ruins, (houses, mud walls and an arch), stretching half a mile in each direction. They surround a mound 300 yards×300 yards, 80 feet high, with very steep sides, surrounded by a moat. Undulations on the top show the remains of (comparatively recent?) buildings, and here and there a piece of wall, built of very small mud bricks, still stands. A great deal of coarse pottery on the top of the mound, but none of the glazed types which can with certainty be placed among the early varieties. Some pieces of plaster (9"×6") and potter's clay found on the top. Half way down the steep sides large quantities of slip-painted ware.

MP/P. 26 miles from Akcha, one mile to the south of the road, a large rectangular mound 100 yards×50 yards, 50 feet high, with flat top and steep sides well broken and worn by rain. The base is surrounded by a ridge, ten feet high. No moat and no adjacent tumuli. A great deal of coarse pottery, and a few fragments of slip-painted ware found on the sides near the top.

Ancient Irrigation Systems near Balkh.—A number of systems of ancient irrigation canals (Plate IX, 2) can be traced on the plain, a detailed survey of which would be a necessary adjunct to any programme of systematic excavation in Bactria. What may be called the classical view elaborated by Holdich¹ is that these canals were fed by the Oxus. But this is contradicted by Idrisi² who says that the Oxus was not used at all for irrigation until it reached a place certainly situated below the modern Russo-Afghan border. Idrisi was merely repeating what Ibn Haukel said in the tenth century.³ It is difficult to believe that the Greeks were more enterprising in this respect than the Turks and Arabs were before Genghis Khan left his mark on the civilization of Bactria, or that, if they were, the Arabs would not have known of such an ancient irrigation scheme and turned their knowledge to some account. There is, on the contrary, some evidence that the Balkh river once reached the Oxus, but an explanation of the dessiccation of Bactria must be left to climatologists, or to those geographers who are familiar with the hydrography of the Hindu Kush.

We left Mazar-i-Sharif on September 22nd. and motored the four hundred miles to Kabul in two days, for news of the European crisis reached us at

¹ 'Gates of India,' p. 75.

² Ed. Jaubert, I, p. 475.

³ Ed. Ouseley, p. 239.

Pul-i-Kumri, where we spent the night with a German engineer and his wife engaged in constructing a hydro-electric scheme for Siemens. We were again the grateful guests of Sir Kerr and Lady Fraser-Tytler for a few days, before recrossing the Khyber with the Afghan mail. On October 3rd we reached our base-camp in Peshawar, the C. M. S. Mission Hospital, where, at the beginning of June, Dr. and Mrs. Macpherson had generously added a party of archæologists to their large family. There we met the two members of our expedition who had just completed their work in Swat. We had travelled over two thousand miles in a stern but fascinating country. No one who has travelled in those wind-eroded valleys and felt the dust of history under his feet can leave Afghanistan without longing to return.

LIST OF PRINCIPAL SCULPTURES AND OTHER OBJECTS FROM SITES IN SWAT.

[The material of the sculptures, unless otherwise stated, is talcose schist. The directions "L" and "R" in the descriptions refer always to proper Left and Right.]

KANJAR KOTE.

OBJECTS FOUND IN DEBRIS OF MAIN STŪPA COURTYARD.

23. *Harmikā* of a small stūpa, 7" square; on each face, Buddha seated between two standing figures.
24. *Harmikā* of a small stūpa, 7" square; on each face, Buddha seated between two standing figures.
25. *Harmikā* of a small stūpa, 9 $\frac{1}{4}$ " square; on the four faces, scenes representing the birth of Buddha, renunciation, first sermon (?), and worship of the *triratna* symbol held aloft by a kneeling figure.
26. Cornice, 14" square, surmounting the *harmikā* of a small stūpa. three-tiered, the border of each tier decorated with lozenge or scroll patterns.
323. Part of a frieze, 7" \times 5 $\frac{1}{4}$ ". Two scenes divided by a framed pilaster. L, the funeral pyre, R, distribution of the relics.
29. Part of a frieze, 9 $\frac{1}{2}$ " \times 3". Kneeling man, and behind him five standing men. one leaning on a staff.
30. Part of a frieze, 9" \times 4". Seated Buddha between two standing figures. divided by a framed pilaster from part of a similar scene.
31. Part of a frieze, 14 $\frac{1}{4}$ " \times 8 $\frac{1}{4}$ ", divided horizontally into two panels by a band of imbricate ornament. Above, continuous frieze of standing figures. Below, two scenes divided by framed pilaster. L, Wrestling and archery contests of the Boddhisattva. R, his wedding. The betrothed, with right hands joined, circumambulate the fire, which is tended by a man seated R. Each side of the fire stands a water pot. Behind each of the betrothed stands a man playing a double pipe.
35. Head of Buddha, 5" high. Lime composition. Wavy hair.
36. Head of Buddha, 3 $\frac{1}{2}$ " high. Lime composition. Wavy hair.
37. Head of lion, 3" high. Lime composition, with faint traces of pigment.

GUMBAT.

OBJECTS FOUND IN DEBRIS ROUND THE STŪPA.

49. *Harmikā* of a small stūpa, 12" square. On the four faces, scenes representing the birth of Buddha, the renunciation, invitation to preach (?), and monks worshipping the *triratna* symbol held aloft by a male figure kneeling on a plinth. Broken in two pieces.
50. Fragment of the *harmikā* of a small stūpa, originally 11 $\frac{1}{4}$ " square. On the remaining face, Buddha seated between two standing figures.
51. Part of a frieze, 17" \times 3 $\frac{1}{4}$ ". Men in toga-like dress, some carrying shields, grouped in pairs between pilasters. (Plate III, 1).
60. Part of the same, 20 $\frac{1}{2}$ " \times 3 $\frac{1}{4}$ ".
67. Part of a similar frieze, 20" \times 3". One of the spaces between pilasters is occupied by two long-tailed birds perched on a bowl.
66. Part of a similar frieze, 12 $\frac{1}{2}$ " \times 3".

57. Part of a frieze, $25'' \times 2\frac{1}{2}''$. Busts of human figures alternating with stunted pilasters. Broken in 2 pieces.
58. Part of a similar frieze, $16\frac{1}{2}'' \times 2\frac{1}{2}''$.
79. Part of a frieze, $15'' \times 4\frac{3}{4}''$. Busts of human figures framed in *chaitya* arches, a rosette between each pair of arches, and the whole surmounted by stepped pyramidal ornament.
59. Part of a frieze, $10\frac{1}{2}'' \times 4\frac{1}{2}''$. Buddha seated in *abhaya mudrā* beneath Indian fig-tree, between two kneeling figures, both with nimbus, in princely dress; the scene flanked by framed pilasters.
55. Part of a frieze, $10\frac{1}{2}'' \times 7\frac{1}{4}''$. Four standing men, in toga-like dress. Upper part of one man and the heads of the other three defaced.
77. Corner of a cornice, $10'' \times 8\frac{1}{2}''$. Bracket pilasters alternating with birds with spread wings. At the corner a winged lion.
335. Corner of a similar cornice, $13'' \times 6\frac{1}{2}''$.
62. Fragments of a cornice, $20\frac{1}{2}'' \times 5''$. Acanthus leaves alternating with human and other figures—women holding bowls, and birds perched on a bowl. (Plate III, 2).
75. Corner of a niche (?). $7'' \times 4''$. Above the lintel of a niche (?) surmounted by bead and reel moulding, a winged cupid, leaning outward to the corner, and the busts of two women, holding clubs (?) and of a third figure apparently with a moon-shaped nimbus. (Plate III, 4).
65. Part of a cornice, $10'' \times 2\frac{1}{2}''$. Two cupids floating, each with a long scarf trailing over the right shoulder. The second one carries in both hands a bunch of drapery (?) (Plate III, 3).
336. Part of a cornice, $15'' \times 2\frac{1}{2}''$. Two cupids floating, the first carrying a bunch of drapery (?) in both hands, the second with legs crossed carries a similar object in R hand and has L hand on hip.
64. Part of a cornice, $10'' \times 2\frac{3}{4}''$. From L to R 6-petalled flower, winged *yaksha* with right arm raised, bird in profile perched on the base of a bowl turned on its side, 8-petalled flower.
76. Part of a cornice, $14\frac{1}{2}''$ long. Five brackets (one broken) formed of the upper parts of human figures playing musical instruments.
53. Part of a frieze, $19'' \times 6\frac{1}{4}''$. Buddha seated in *dhyāna mudrā* on a throne beneath Indian fig-tree: on either side of him, a seated and a standing monk. At each end of this scene, a framed male figure standing under a tree. R. part of a second scene: two seated figures, with nimbus, in princely dress.
52. Fragment of a frieze, $10\frac{1}{2}''$ long. Top part of a scene: Buddha seated under Indian fig-tree, surrounded by hermits in attitudes of adoration.
70. Part of a frieze, $11'' \times 4\frac{1}{4}''$. Māyā's dream. The elephant enters her right side as she lies on a couch in an arcade, whose tiled roof is supported on Indo-Corinthian columns. At each end of the arcade stands a woman armed with a spear.
69. Part of a frieze, $13'' \times 5\frac{1}{2}''$. The Bodhisattva's first bath. He stands between Indra and Brahmā who pour water over him from lotas.
78. Part of a frieze, $10\frac{1}{2}'' \times 4\frac{1}{4}''$. Fragments of two scenes divided by a framed pilaster. L, a fortified tower (?). R. Asita casts the Buddha's horoscope.
68. Part of a frieze, $11'' \times 5\frac{1}{2}''$. Parts of two scenes, divided by a framed pilaster. L, the return from the Lumbini garden (?). Māyā seated full face, with the baby on her lap, in a litter: on each side, a male figure, with nimbus, with one hand supporting the litter. R. (separated by a framed pilaster) a figure walking L, holding a pot in both hands.

72. Part of a frieze, $18\frac{1}{2} \times 8\frac{1}{2}$ ", divided horizontally into two panels by a band of imbricate ornament. Above, a continuous frieze: Buddha seated in European fashion, and again in profile, surrounded by hermits. Below, three scenes divided by framed pilasters. L, the archery contest. Centre, Devadatta killing the elephant. R, (broken) the elephant dragged through the city (?).
71. Part of a frieze, $16 \times 8\frac{1}{4}$ ", divided horizontally into two panels by a band of imbricate ornament. Above, a continuous frieze: Buddha seated in profile, and again in converse with a hermit seated before his hut, and other figures. Below, two scenes divided by a framed pilaster. L, the archery contest, on horseback. R, the elephant killed by Devadatta and dragged across the city. (Plate V, 1.)
73. Part of a frieze, 22×10 ", broken and defaced: divided horizontally into three panels by two bands of imbricate ornament. Above, continuous frieze of human figures with trees at intervals. L to R, two figures at a fire altar (?): Buddha seated, surrounded by an aureole, with worshippers: a hermit seated in front of his hut. Centre panel, undulating garland of pipal leaves. Below, scenes divided by framed pilasters: L and Centre, too broken for identification. R, Birth of Buddha.
61. Part of a frieze, $11\frac{1}{2} \times 5\frac{1}{4}$ ", much defaced. Three men carrying large shields.
80. Bodhisattva, $9\frac{3}{4}$ " high, seated in *dhyāna mudrā* (Plate VII, 1.)
82. Bodhisattva, $7\frac{3}{4}$ " high, seated in *dhyāna mudrā*, much defaced.
83. Head of Buddha, 7" high.
85. Head of Bodhisattava, $4\frac{1}{2}$ " high.
87. Head of Bodhisattva, $3\frac{1}{2}$ " high.
88. Hand of Buddha in *abhaya mudrā*, 4" long.
89. Hand of Buddha in *abhaya mudrā*, 4" long.
39. Hand of Buddha in *abhaya mudrā*, 6" long.
40. Head of Buddha, $2\frac{3}{4}$ " high. Lime composition. Hair indicated by irregular dots: eyes large and wide open: very coarsely modelled. The nimbus bears traces of pigment.
91. Fragment of a pilaster capital, $5\frac{1}{2}$ " high, Lime composition. Headless seated Buddha and acanthus foliage.
41. Bell, $7\frac{1}{2}$ " long. An iron cylinder, the lower part of one side of which is broken. Part of the clapper was found attached by rust to a knob in the centre of the top end of the cylinder. An S-shaped hook passes through a ring on the outside of the top of the cylinder. (Plate VIII, 3.)

AMLUK.

OBJECTS FOUND IN THE DEBRIS ROUND STÜPAS A AND B.

102. Seated Buddha (headless), $5\frac{1}{2}$ " high: with right hand in *abhaya mudrā* and left in the lap. Behind his left shoulder a monk appears, and on the plinth are the upper parts of three seated back view, one being a monk.
103. Head of Buddha, $4\frac{3}{4}$ " high. Wavy hair.
104. Part of a cornice, 6". Floating cupid, legs crossed, with loin cloth, holding a scarf in both hands.
105. Part of a frieze, 5" high. Two birds perched on the leafy roof of a hut.
106. Seated Bodhisattva (headless), 13" high. Right hand in *abhaya mudrā*, left carries flask, Much defaced.
107. Seated Buddha, 27" high. Hands in *dharmacakra mudrā*, legs drawn up showing up-turned soles. Has wavy hair, and moustache lightly indicated. The right shoulder is bare. Left knee and right arm broken, otherwise in good repair. (Plate IV, 2.)

108. Seated Buddha, $6\frac{1}{2}$ " high. Right hand in *abhaya mudrā*, left hand grasps the corner of his robe. Wavy hair. Robe covers both shoulders. (Plate VII, 2).
109. Part of a frieze, 8" high. Two figures from unidentified scene.
110. Panel, with fragments of others above and below, $12\frac{1}{2}$ " high; standing Buddha, in *abhaya mudrā*, between two figures, one in monastic and one in princely dress, with hands clasped in adoration. High relief. Two of the figures headless and the third defaced.
111. Part of a frieze, $9\frac{1}{4}$ " long. Male and female figures under *chaitya* arches, separated by 'Indo-Persian' pilaster.
112. Part of a frieze, 15" long, divided horizontally into two panels by a band of heart-shaped ornament. Above, standing figures framed in *chaitya* arches. Below, undulating pipal-leaf garland.
113. Plinth, $7\frac{1}{2}$ " high, of standing Buddha figure, broken off at the ankles. The front carved with two standing monks worshipping Buddha's alms bowl, placed on a throne beneath a canopy. At each corner, a pilaster.
114. Four fragments of a frieze, the largest being $18" \times 15"$, bordered above by a band of imbricate ornament, and below by undulating vine leaf garland. From L to R, framed 'Indo-Persian' pilaster with *yakshī* on the shaft; Buddha beneath the pipal tree surrounded by monks and other figures: Buddha beneath the Indian fig-tree surrounded by worshippers in lay dress. (Plate IV, 3.)
125. Head of Buddha, $2\frac{3}{4}$ " high, from a frieze.
158. Head of Buddha, $8\frac{1}{2}$ " high. (Plate IV, 1.)
160. Fragment, 15" long, of a scene showing the distribution of Buddha's relics. A fire altar standing in front of a draped couch.

CHINABARA.

OBJECTS FROM TRENCHES ON UPPER TERRACE.

161. Head of Buddha, 5" high, wavy hair.
163. Figure of kneeling *yaksha*, $3\frac{1}{4}$ " high, from a frieze.
167. Fragment of relief, $14\frac{1}{2}" \times 4\frac{3}{4}"$, from the riser of a step(?); undulating vine scroll framing head and shoulders of two women, each holding a bowl, and between them a bird with wings spread, perched on a bowl.
168. Part of the round base of a small stūpa, $13\frac{1}{2}" \times 4"$. Panels showing the seated Buddha, flanked by adoring figures, the panels separated by framed pilasters, and surmounted by modillion cornice.
172. A similar fragment, $12" \times 5"$.
169. Panel, $30" \times 6\frac{1}{2}"$, from the riser of a step. An undulating imbricate garland carried by human figures, with others framed in the loops.
170. A similar panel, $30" \times 6\frac{1}{2}"$. Each of the two central figures has one leg advanced and raised, with the foot resting on top of a bowl. (Plate VII, 3.)
171. Fragment, $21" \times 6\frac{1}{2}"$, of a similar panel.
173. Plinth, $5" \times 7"$, of standing Buddha figure, which is broken off at the ankles. On the front, a stūpa flanked by two kneeling monks.
175. Three fragments, the largest $5" \times 4\frac{1}{2}"$, from the head of a large Buddha in terra-cotta.

OBJECTS FROM TRENCHES IN THE LOWER TERRACE.

176. Lamp, 3" square, inscribed in Kharoshthī characters round the rim. The inscription runs:
Sagami cūvaisami (? ga da) agisala (e go so ?).

177. Circular lamp, diam. $2\frac{1}{4}$ ". Terracotta.
 181. Part of cylindrical jar, diam. 4", with hole bored in the lower end. Iron.

NAWAGAI.

OBJECTS FROM AREA OF MAIN STŪPA.

117. Fragment of a frieze, $9" \times 8"$, depicting probably a prince carrying home a share of Buddha's distributed relics. Man riding on a camel, holding a casket (?) before him in both hands. L of the camel stands a soldier with skirt of mail, holding a spear. Between the rider and the camel's neck appear the head and shoulders of a third man. The heads of all three figures sliced off, and the whole much defaced.
 118. Fragment of a frieze, $8\frac{1}{2}" \times 13"$. Part of *Dipaṅkara jātaka* scene.
 119. Buddha, 15" high, (headless) seated in *dhyāna mudrā* on a plain throne raised on a plinth. On the plinth to R. of the throne are the feet of a standing figure.
 338. Fragment of a frieze, $11" \times 17"$, much battered. Four three-quarter length figures, in princely dress, in attitudes of adoration.

OBJECTS FROM AREA OF SMALL STŪPAS.

- 120-2. Three fragments of a frieze, 13", $13\frac{1}{2}"$, and $9" \times 3\frac{1}{2}"$; men with spears and bow-and-arrow hunting boars and lions.
 123. Head of Buddha or Bodhisattva, 7" high, with moustache and wavy hair. The *ushniṣa* encircled by a fillet with a rosette in front.

ABARCHINAR.

OBJECTS FOUND IN DEBRIS ROUND STŪPA L.

137. Head of Buddha, 8" high, wavy hair. Nimbus and right side of face broken.
 138. Bodhisattva, 22" high. Broad, squat body and broad face. Seated with upturned soles of the feet showing, right hand in *abhaya*, left carrying flask. The hair done in tight curls and gathered in a double loop on top of the head. The nimbus has a border of flame ornament. Both hands and the lower part of the body sliced, otherwise in good repair. (Plate V, 4.)
 139. Head of Bodhisattva, $6\frac{1}{4}"$ high. Ornament in the centre of the headdress in the form of a lion's head. (Plate V, 2.)
 140. Part of a pilaster capital, 18" long. In the centre of the capital Buddha seated in *dhyāna mudrā* amid acanthus foliage.
 141. Part of a pilaster capital, 18" long. In the centre of the capital, Sūrya (?) standing with right hand upraised in a four-horsed chariot, flanked by two charioteers. (Plate VII, 4.)
 142. Fragment, $9" \times 11"$, probably from a scene showing the birth of Buddha. L, arm of Māyā grasping the bough. To her right is the head of Indra (?), and behind him the head of a man in princely dress, biting his fingers. Above, a floating scarf and a drum. High relief.
 144. Fragment, $9\frac{1}{2}" \times 7"$, perhaps from the same scene as No. 142. Standing male and female figure, looking L. The man has round, flat, two-tiered head-dress, the woman has bat-like wings. High relief. (Plate V, 5).
 145. Part of a cornice, $7" \times 6"$. Head and shoulders of a winged lion.
 147. Part of a decorative band, $9\frac{1}{2}" \times 3\frac{3}{4}"$. Formal lotuses and other flowers.

148. Part of a decorative band, 8"×4". Formal lotuses.
 150. Indo-Corinthian pilaster. 6" long, with S-shaped shaft from a cornice.
 151. Indo-Corinthian pilaster. 5½" high.

FROM AREA OF STŪPA A.

153. Figure of Vajrapāṇi, 6" high, from a frieze.

FROM AREA OF STŪPA C.

147. Standing figure under *chaitya* arch. 5½" high.

FROM DEBRIS ROUND STŪPA B.

126. Head of Buddha, 5½" high. Lime composition.
 127. Head of Buddha, 9" high. (Plate VI, 3.) Lime composition.
 128. Head of Buddha, 5½" high. Lime composition.
 129. Head of Buddha, 6" high. Lime composition.
 130. Head of Buddha. 5¾" high. Lime composition.
 131. Head of Bodhisattva. 9¼" high. (Plate VI, 4.) Lime composition.
 132. Head of Buddha, 7½" high. (Plate VI, 1.) Lime composition.
 133. Head of Buddha. 5" high. Lime composition.
 134. Head of Buddha, 5½" high. Lime composition.
 135. Head of Buddha, 6" high. Lime composition.
 136. Head of Buddha, 5½" high. Lime composition.

PARRAI.

OBJECTS FROM AREA OF MAIN STŪPA.

318. Part of a frieze, 8½"×9½". Three men standing in attitude of adoration. Green stone.
 319. Part of a frieze, 16"×9", stūpa-railing ornament. Green stone. (Plate V, 3.)
 320. Part of a frieze, 11"×5¼". Stūpa-railing ornament.

JAMPURE DHERI, CHARBAGH.

OBJECTS OTHER THAN POTTERY FRAGMENTS.

"A" trench.

190. 6 small fragments of coloured glass. 3' below surface.
 191. Fragment, 1¼" long, of a bone ring. 3' below surface.
 201. Polished egg-shaped pebble, 1¾" long. 3' below surface.

"B" trench.

215. Stone ring, 1" in diameter. 2' below surface.
 211. Two small fragments of green glass. 4½' below surface.
 224. Sausage-shaped bead of blue glass, pierced ¼" long, 4½' below surface.
 277. Sausage-shaped bead of red glass. 7' below surface.
 259. Fragment, 1¼" high, of the figure of a woman, dark red polished terra-cotta. (Plate VIII, 2.)
 276. Terra-cotta figure of an animal, the legs and head broken. 2½" long. 7' below surface.
 (Plate VIII, 2.)

"C" Trench.

212. Fragment of red glass. 1½' below surface.
 216. Fragment of stone carving (wavy lines indicating drapery?). 1' below surface.

257. Polished terra-cotta ram's head, 2" high. 5' below surface. (Plate VIII, 2).

Trenches E. F. G. H.

284. Terra-cotta figure of horse with saddle, $2\frac{1}{2}$ " long, one leg broken. 1' below surface. (Plate VIII, 2.)

295. Iron sickle, $6\frac{1}{2}$ " from tip to tip. 2' below surface.

301. Iron heart-shaped ornament, $2\frac{3}{4}$ " across. 1' below surface.

282. Earthenware bowl, $2\frac{3}{4}$ " diam. 2' below surface. (Plate VIII, 1.)

283. Earthenware bowl. 2" diam. 2' below surface.

291. Earthenware bowl. $3\frac{1}{2}$ " diam. 1' below surface. (Plate VIII, 1.)

293. Earthenware bowl. $1\frac{1}{2}$ " diam. 2' below surface.

299. Flat dish with spout, diam. of base 2". 5' below surface.

300. Flask, pierced at the neck, diam. of base $1\frac{1}{2}$ ". 3' below surface. (Plate VIII, 1.)

307. Flask, greatest diam. $3\frac{1}{2}$ ". 2' below surface. (Plate VIII, 1.)

309. Bowl, diam. of mouth $2\frac{1}{4}$ ". 1' below surface. (Plate VIII, 1.)

OBJECTS FROM UNKNOWN SITES ACQUIRED AT THANA AND ELSEWHERE.

100. Figure of Vajrapāṇi. $7\frac{1}{4}$ " high. Lime composition. (Plate VI, 2.)

18. Standing Bodhisattva (feet and arms missing), 15" high.

19. *Harmikā* of a small stūpa, 10" square.

20. Fragment, 7" high, in green stone of a relief. The figures of Māyā and her sister from a birth scene.

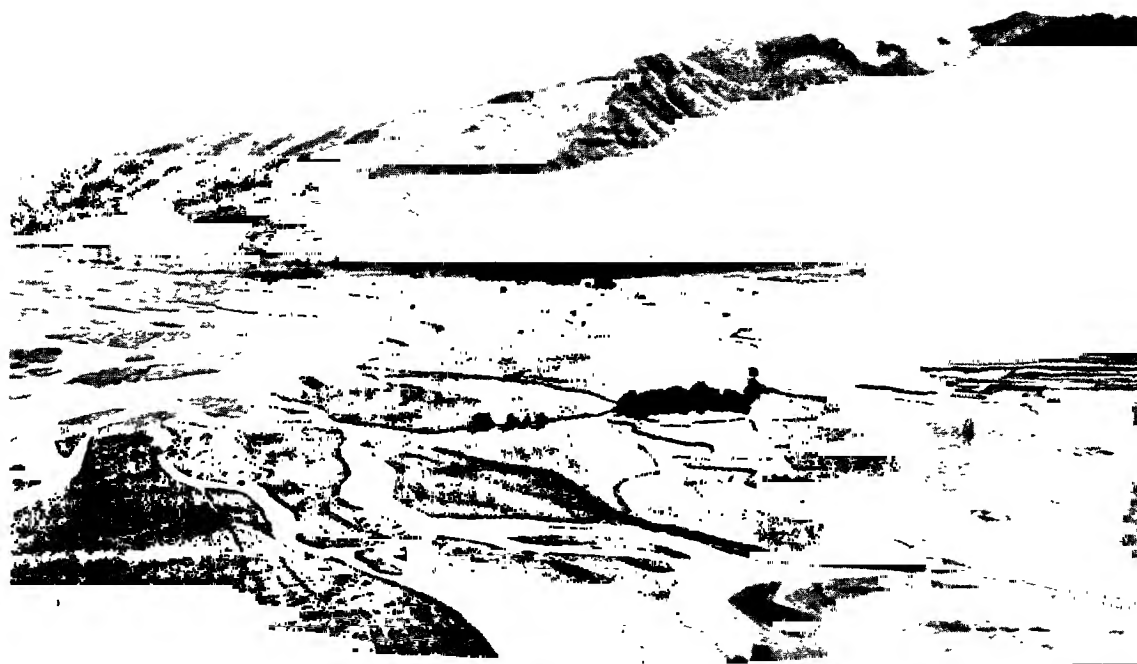
21. Circular palette, diam. $4\frac{1}{4}$ ", divided into two panels: in the upper panel a naked man between two women. (Plate VIII, 4.)

339. Circular palette, diam. 4". Divided into two panels, the lower carved with lotus petals, the upper too much defaced for identification.

(65)

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1. THE SWAT VALLEY FROM BARIKOT HILL



2. BARIKOT HILL, WITH THE SWAT RIVER BEYOND.



1. BASE OF MAIN STUPA & SMALL STUPAS, KANJAR KOTE. (*After excavation*)



2. STUPA A, AMLUK.



3. BASE OF SMALL STUPA, AMLUK.



4. JAMPURE DHERI, CHIRBAGH, FROM THE EAST.



1. No. 51



2. No. 62



3. No. 65



4. No. 75

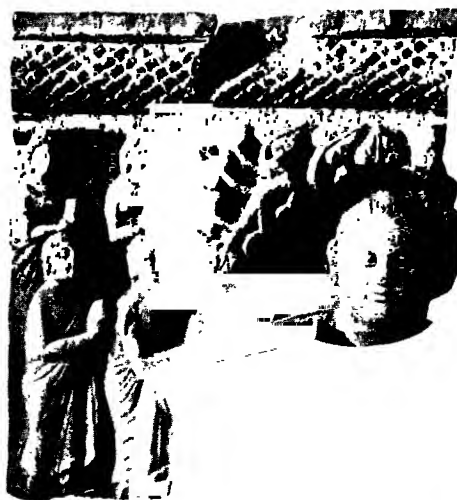
HELLENISTIC FRIEZES FROM GUMBAL.



1. HEAD OF BUDDHA. AMLUK. No. 158



2. BUDDHA AMLUK No. 107



3. FRAGMENTS OF A FRIEZE. AMLUK No. 114



1. "LIFE-STORY" FRIEZE. GUMBAT. NO. 71



2. HEAD OF BODHISATTVA. ABARCHINAR. NO. 139



3. "STUPA RAILING" ORNAMENT. PARRAI. NO. 319



4. BODHISATTVA, ABARCHINAR. NO. 138



5. TWO FIGURES FROM A FRIEZE. ABARCHINAR. NO. 144



1. HEAD OF BUDDHA. LIME COMPOSITION.
ABARCHINAR. No. 132.



2. VAJRAPANI. LIME COMPOSITION.
ACQUIRED AT BARIKOT. No. 100.



3. HEAD OF BUDDHA. LIME COMPOSITION.
ABARCHINAR. No. 127.



4. HEAD OF BODHISATTVA. LIME COMPOSITION.
ABARCHINAR. No. 131.



1. BODHISATVA GUṆḌAMA No. 80.



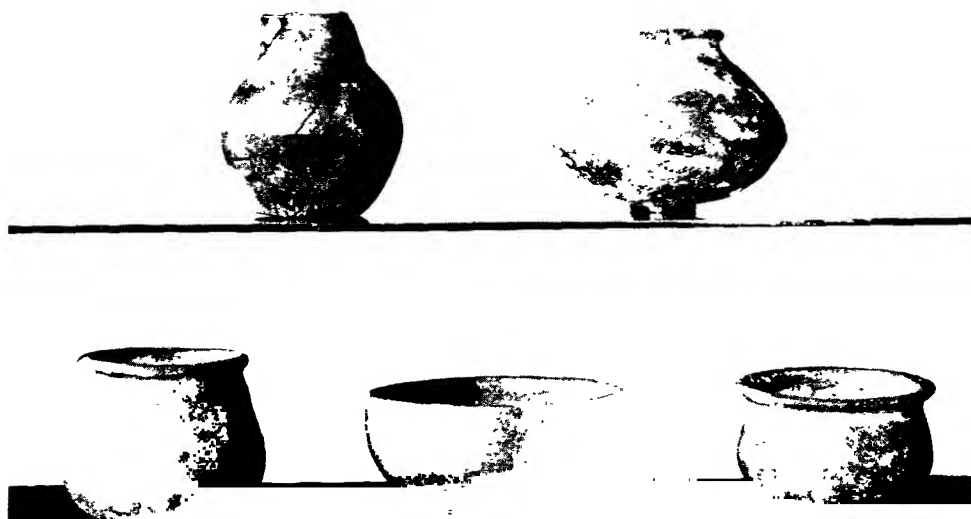
2. BUDDHA AMLUK. No. 108.



4. PILASTER CAPITAL. ABAKHINAR. No. 141.



3. PANEL. CHINABARA. No. 170.



1. SMALL POTTS. JAMPURE DHERI. (300, 307, 309, 291, 282).



2. TERRACOTTA FIGURES. JAMPURE DHERI. (257, 276, 259, 284)



3. BELL GUMBAT. NO. 41

4. PALETTE. ACQUIRED AT BARIKOT. NO. 21.



2. ANCIENT IRRIGATION CHANNELS NEAR BALKH



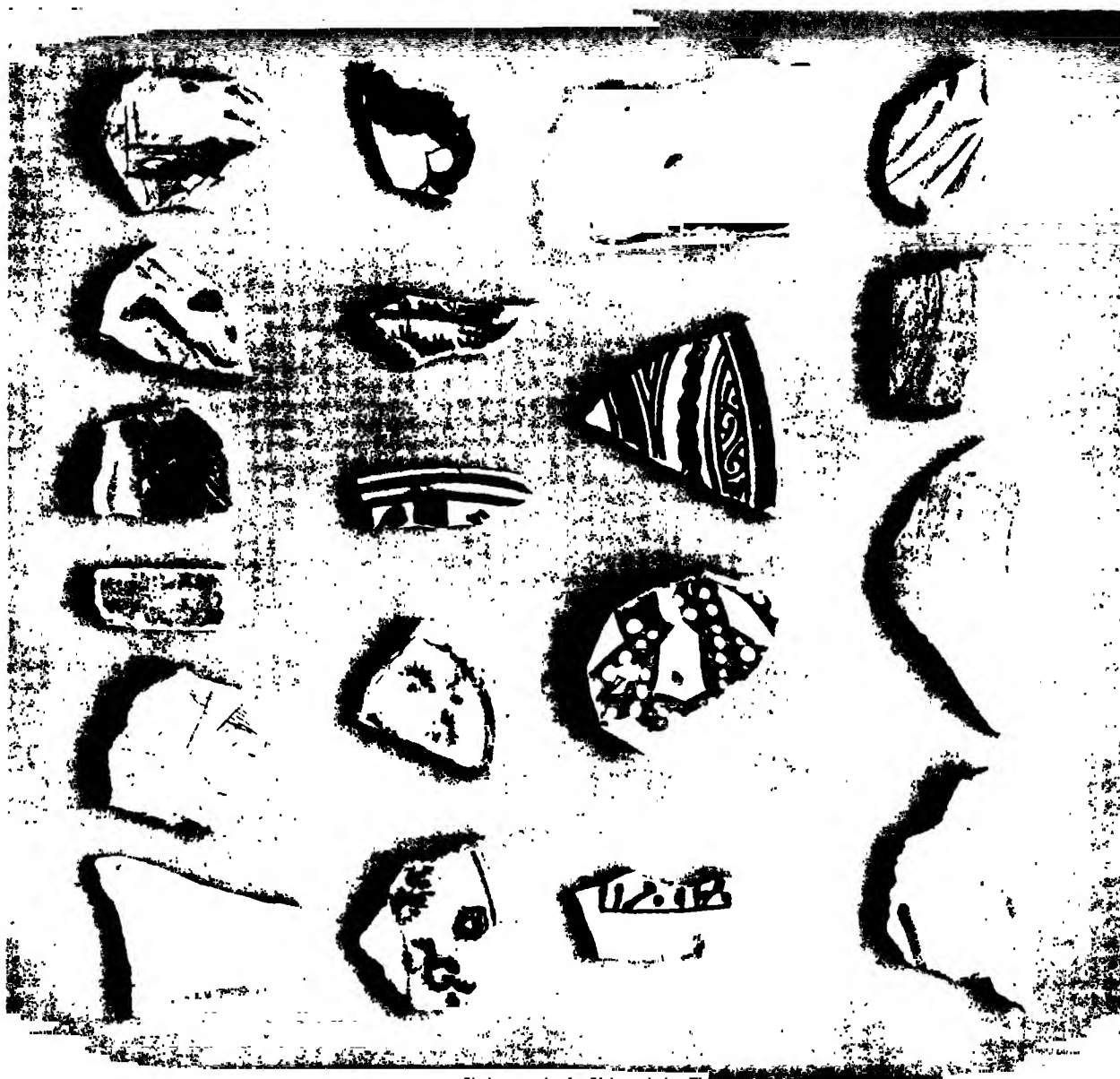
1. THE WALLS OF BALKH



4. HELLENISTIC COLUMN BASE KUNDUZ



3. ANCIENT CITY NEAR ARCHAI, AFGHAN TURKISTAN



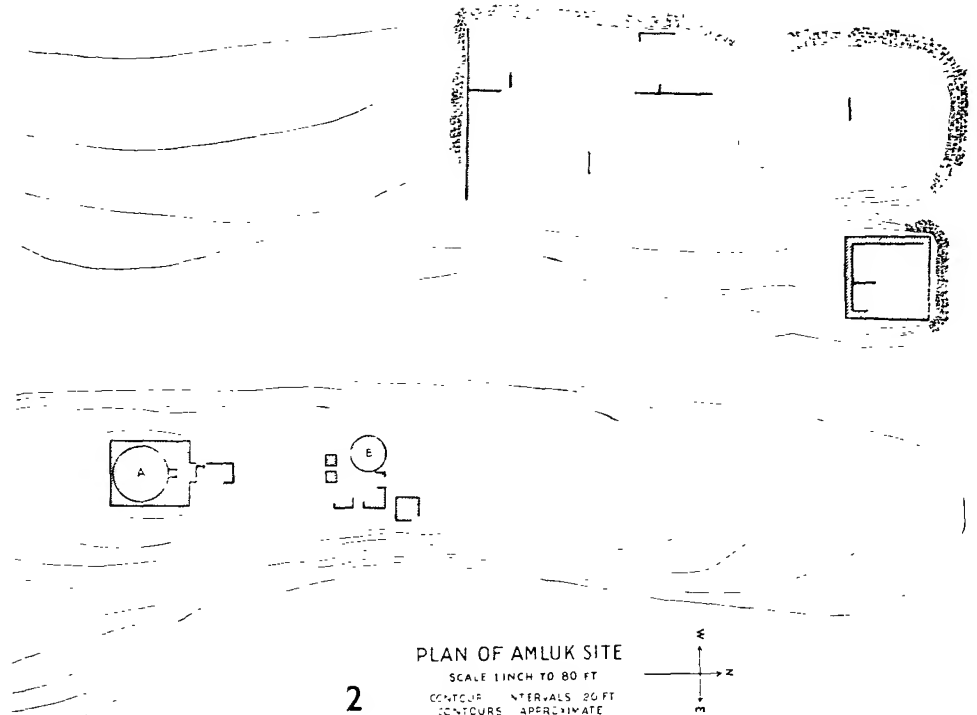
1. POTTERY FRAGMENTS FROM VARIOUS SITES IN NORTHERN AFGHANISTAN.



2. IMPRESSIONS FROM SEALS, NORTHERN AFGHANISTAN.

KANJAR KOTE

SCALE 1" = 240 FT.
CONTOURS EVERY 40 FT APPROX.
EXCAVATED AREAS SHADED

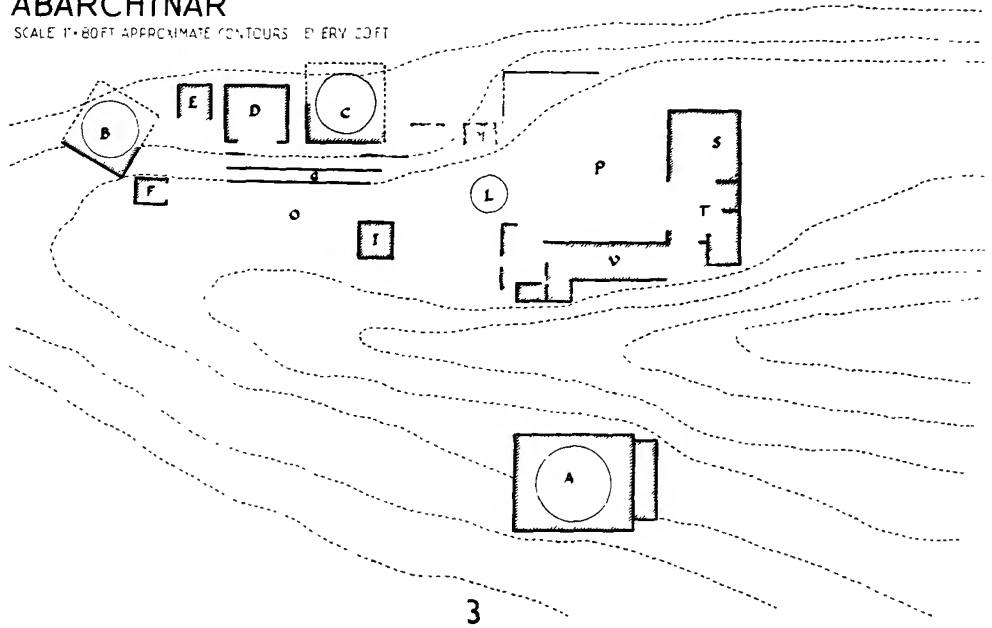


PLAN OF AMLUK SITE

SCALE 1 INCH TO 80 FT
CONTOUR INTERVALS 20 FT
CONTOURS APPROXIMATE

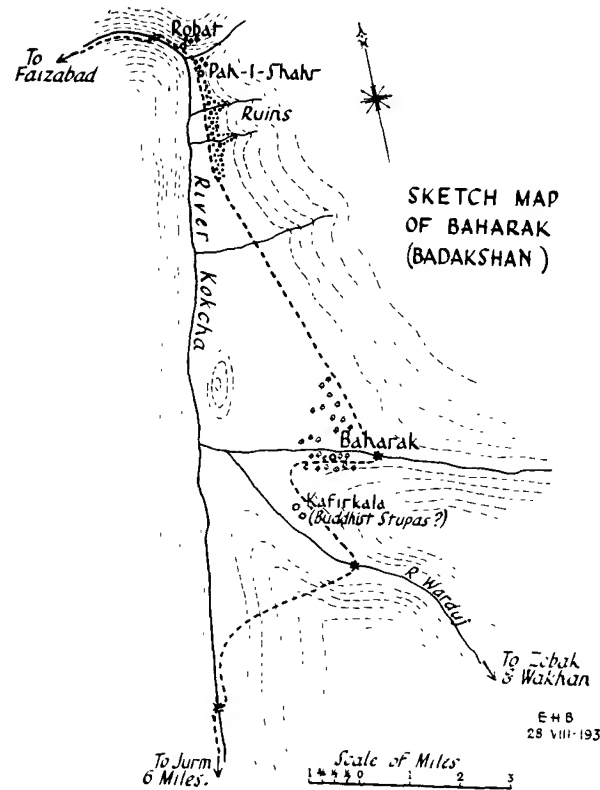
ABARCHINAR

SCALE 1" = 80 FT APPROXIMATE CONTOURS EVERY 20 FT



JAMPURE DHERI

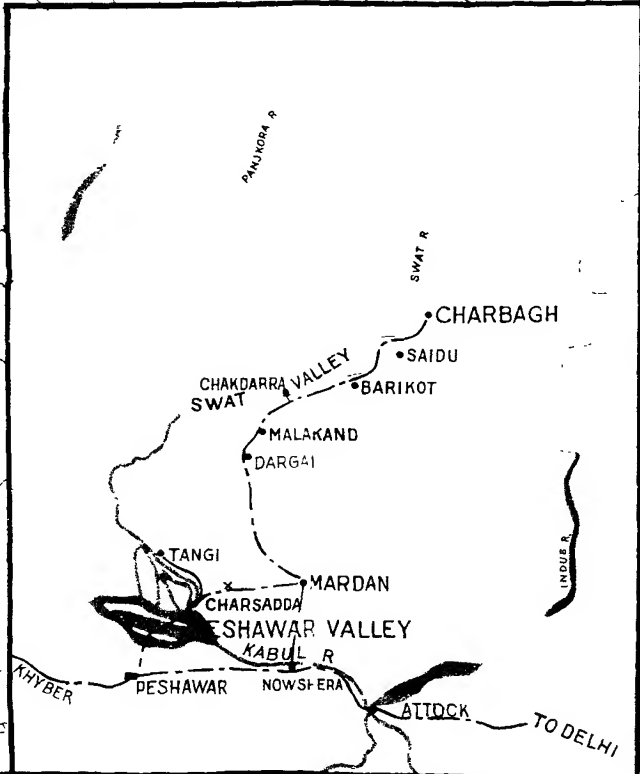
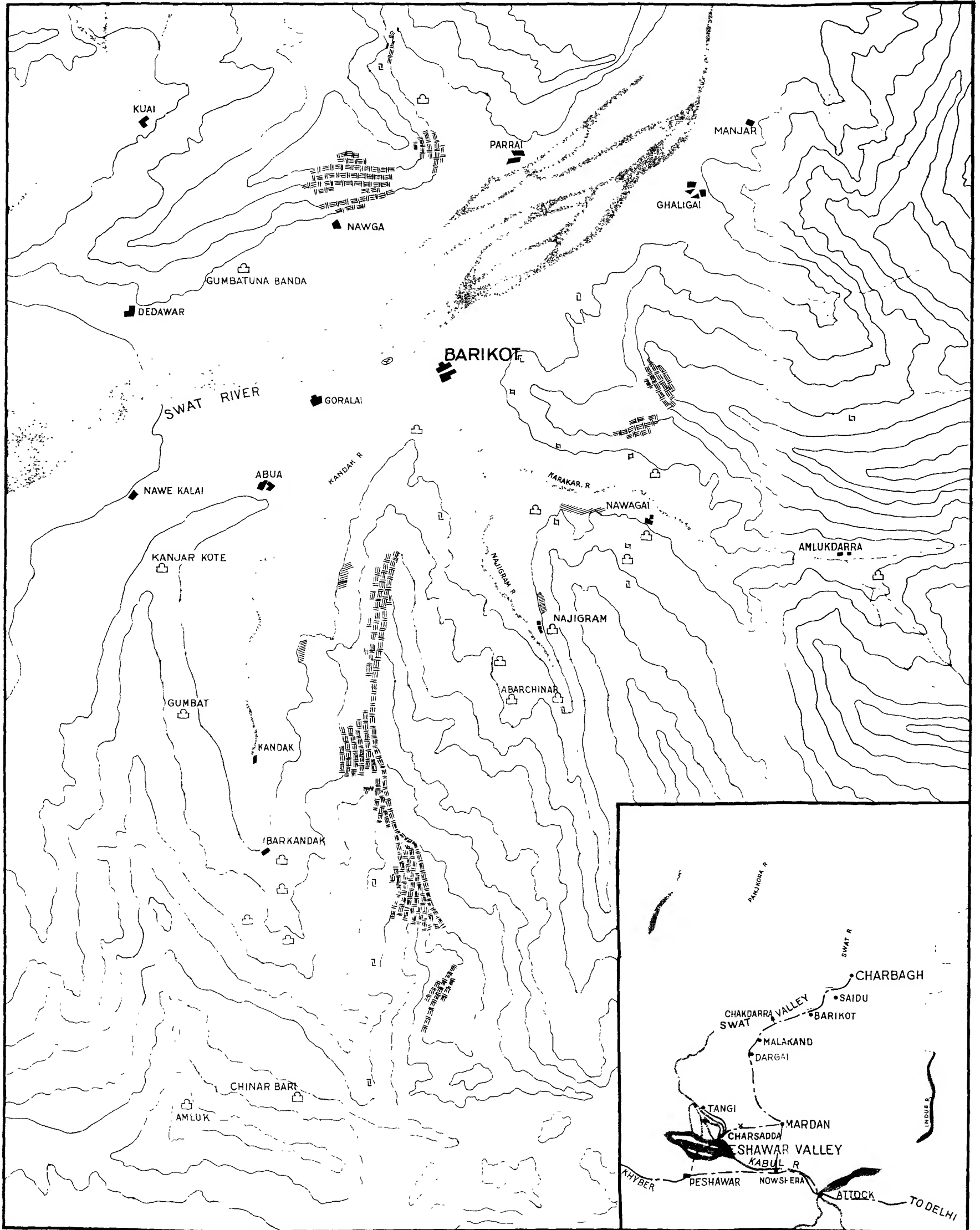
SCALE 1" = 480 FT
CONTOURS EVERY 40 FT APPROX.
TRENCHES
WALLS



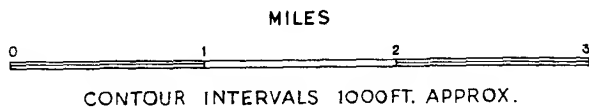
SKETCH MAP OF BAHARAK (BADAKSHAN)

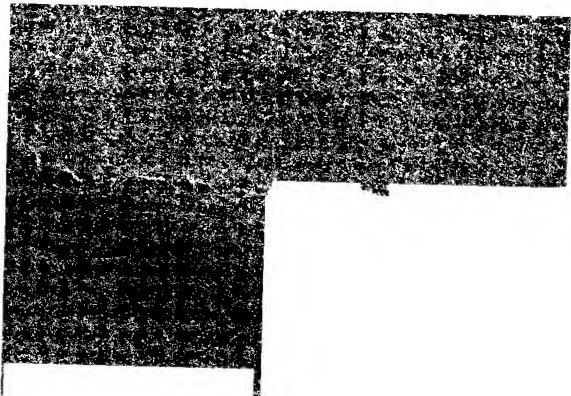
E H B
28 VIII-1938

Scale of Miles
1 2 3



- STUPA
- RUINED BUDDHIST SITE
- ▨ ANCIENT FIELD TERRACES





1

2

3

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